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DEPARTMENT OF HEALTH AND  
PUBLIC WELFARE



Winnipeg, Canada

March, 1929

REPORT ON  
TUBERCULOSIS IN MANITOBA

by

Health and Hospital Survey Committee  
of the  
Welfare Supervision Board  
Manitoba

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Report No. 2

of the

Department of Health and Public Welfare



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## COMMITTEE AND STAFF

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### HEALTH AND HOSPITAL SURVEY COMMITTEE OF THE WELFARE SUPERVISION BOARD

Mr. Osmond Marrin, Chairman,  
Mrs. Digby Wheeler,  
Dr. E. S. Moorhead,  
Dr. G. F. Stephens,  
Mr. R. D. Guy, K.C.,  
Rev. J. R. Mutchmor, Secretary.

---

### STAFF

Dr. Fred. W. Jackson ..... Medical Officer.  
Miss A. B. Baird, Reg. N. .... Investigator.  
Miss Mabel F. Gray, Reg. N. .... Investigator.  
Miss Evelyn Mackay ..... Stenographer.  
Miss M. P. Bryant ..... Stenographer.  
Mr. H. P. Morrison, M.A., F.A.S. .... Statistician.

Winnipeg, December 26th, 1928.

Hon. E. W. Montgomery, M.D.,  
Minister of Health and Public Welfare,  
Legislative Buildings,  
Winnipeg, Manitoba.

Dear Sir,—

The Welfare Supervision Board have the honor to submit, herewith, the results of survey made regarding Health and Hospitalization in Manitoba as requested in your letter of February 13, 1928.

J. M. THOMPSON,  
Chairman.

J. R. MUTCHMOR,  
Secretary.

**DEPARTMENT OF PUBLIC WELFARE  
WINNIPEG**

**OFFICE OF THE MINISTER**

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February 13th, 1928.

Rev. J. R. Mutchmor,  
Secretary Welfare Supervision Board,  
Robertson House, Burrows & McKenzie,  
Winnipeg.

Dear Mr. Mutchmor,—

At a rather informal meeting of the trustees of the Manitoba Sanatorium held today, it was decided that something should be done as soon as possible to make it practicable to care for a larger number of patients in this Province who have tuberculosis.

As the first step towards this end it was decided to urge upon the Welfare Supervision Board to undertake a survey of the Province in regard to certain problems connected with hospitals and with morbidity outside of hospitals in the Province, having in view particularly the incidence of tuberculosis. You may have seen a copy of the resolutions of the Provincial Board of Health on this subject which were adopted at the meeting of the Manitoba Medical Association in September last. These resolutions outline the purpose of such a survey fairly well, and based on these resolutions I am forwarding you, herewith, an outline of what might be assigned to the Hospital Committee of the Welfare Supervision Board to undertake. This committee might consist of at least five members from your Board.

There are so many angles to this problem that would require rather full discussion that it is impossible for me to deal with the subject at all adequately by correspondence, but if you would advise me as to the date of your next meeting I would be glad indeed to attend it, and we could go into the subject at some length.

I am very desirous of having something done as soon as possible because the Sanatorium Board would like some definite information as to the incidence of tuberculosis, particularly among children, and in regard to tuberculosis which is non-pulmonary, before July 1st, which gives us about three months in which to carry forward this survey.

Believe me,

Yours sincerely,

(Sgd.) E. W. MONTGOMERY,  
Minister of Health and  
Public Welfare.

Outline of Committee and duties as suggested by the Minister of Health and Public Welfare:

**Health and Hospital Survey Committee of the  
Welfare Supervision Board**

**3 or 5 members—**

Survey hospitals of all classes as to:

- (a) Organization
- (b) Means of support
- (c) Character of work (efficiency)
- (d) Difficulties
- (e) Shortcomings.

Survey of Province area by area as to:

- 1. Hospital accommodation.

Survey of sick of Province:

- (a) Acute illnesses: (1) Infectious diseases.  
(2) Maternity Cases.  
(3) Industrial diseases.  
(4) Accidents and Surgical cases.  
(5) Non-infectious medical cases.
- (b) Chronic Diseases: (1) Tuberculosis.  
(2) Cancer.  
(3) Non-infectious chronic disease:
  - (1) Curable.
  - (2) Incurable.



# TABLE OF CONTENTS

1. Authority of committee—scope of survey .....	Page 5
2. Personnel of Committee and Staff .....	3
3. Introduction: Brief history of settlement in Manitoba — racial groups—distribution of population—sources of Pro- vincial revenue .....	9-11

## PART I

### TUBERCULOSIS

<b>Section 1—Sources of Medical Officer's Data:</b> Letters to practising physicians—institutions in- vestigated—Itineraries—area covered .....	12-15
<b>Section 2—Investigation of Records:</b> Review of records in Health Department, Winni- peg City Hall, hospitals in Greater Winnipeg, Red Cross office, Ninette Sanatorium and in D.S.C.R. files — Information checked with records in De- partment of Public Health, Legislative Buildings— Study of Indian population — questionnaires to municipalities .....	15-17
<b>Section 3—The Survey Office:</b> Letters sent to practising physicians and superin- tendents of hospitals and institutions—method of collecting data—correspondence .....	17
<b>Section 4—Round Table Conferences:</b> With representatives of institutions engaged in the care of tubercular subjects—questions asked—re- sume of information given .....	17-33
<b>Section 5—Statistician's Report:</b> Tables giving age and sex groups — country of origin—institutional and non-institutional cases— arrested and unarrested cases—home contacts— commentary .....	34-45
<b>Section 6—Existing facilities for dealing with Tuberculosis:</b> Sanatoria—Hospitals—Travelling and Out-patient clinics—under private care .....	46-49
<b>Section 7—General Deductions:</b> Need of co-ordination of forces—financing treat- ment — bed situation — analysis of occupational groups — types of cases and their treatment— clinics .....	50-58
<b>Section 8—Recommendations:</b> Regarding beds, sanatorium provision—control— visiting nursing service — records — clinics — re- establishment .....	58-59



## INTRODUCTION

The purpose of this introductory chapter of the Report on Health and Hospitals in Manitoba is to indicate certain general conditions of our Provincial structure, government, population, climate, railway and other means of transportation, occupations, institutions, etc. etc., that are important in connection with such a survey. Some of the material is a repetition of similar statements made in other reports. It is to emphasize these and to add other information and to relate the whole to the problems under review that this introductory chapter is regarded as necessary to this report.

Following the exploits of early discoverers in the Hudson's Bay and from the Eastern part of the Continent in the seventeenth and eighteenth centuries, and the period of fur trading and the early settlements during the latter part of these and the first decades of the nineteenth centuries, we come to the beginning of permanent and growing settlements. The first settlers for Manitoba were located in the Red River Valley in 1812 by Lord Selkirk. On July 15th, 1870, Manitoba began its history as a Province in the new Dominion. From this date we can trace the growth of population in five year periods (except from 1871-1881). The following table from the Census of the Prairie Provinces, 1926, reveals developments during the past fifty-five years.

1871	25,228
1881	62,260
1886	108,640
1891	152,906
1896	193,425
1901	255,211
1906	365,688
1911	461,394
1916	553,860
1921	610,118
1926	639,056

The fact that the growth in actual population from 1921-26 is the smallest of any of the five year periods of the last half century since confederation must not be viewed with undue alarm when we remember the very detrimental effect of the great war. There is every reason to believe that the population of Manitoba will continue to increase at least as rapidly in the next fifty years as in the past fifty-five years. In planning for the next two or three decades and for the health and hospital needs of these years we must plan for the requirements of a province with a million people as inhabitants.

The constituent elements of our population and its variations require to be considered. Since confederation we note that the relative number under twenty years of age has increased until in 1926 it exceeds 260,000 persons of a total population of 625,840. In the same connection we note that the relative number of persons 60 years of age and over has increased. In other words, our population includes a more uniform division in age groups than formerly. If we were to use a graph to express the change we would note that while in 1881 the curve rose to a sudden and abrupt peak in the age groups between 20 and 40 years, it now rises rather sharply to a maximum in the 15-20 year group and then declines very gradu-

ally and uniformly with the exception of a slight rise in its 30-40 year period. In other words, we have a relatively increasing task to deal with—children and young persons on the one hand and aged persons on the other. This is a very important development and must be considered in planning for the health needs of our province.

In addition to the age groups we must consider the nationalities that make up our population. At the present time 52.25% of our population are listed as born in Manitoba, 66.10% in Canada, 82.62% in the British Empire and 17.38% of foreign birth. It is even more important, however, to note the racial origins of our population. The census returns list 28 countries of birth outside the British Empire. We need, however, consider chiefly six, i.e. British, Germanic, Latin, Scandinavian, Hebraic and Slavic. The census returns are approximately as follows:

	1911	1926
British .....	57.7%	55.6%
Germanic .....	9.3%	6.6%
Latin (including French and French Canadian) .....	7.4%	7.7%
Scandinavian .....	3.5%	4.3%
Slavic { Ukrainian .....	10.8%	15.9%
{ Russian .....		
{ Polish .....		
Hebraic .....	2.3%	2.4%

The decrease in the Germanic group may be due to a variation of returns during and after the war rather than in the population group as such. It is a well known fact that persons who gave Germany as their birth place in 1911 claimed a different country of origin in 1921. It will be noted further that the largest proportion in addition to the population is in the Slavic group. In considering certain health and hospital problems in "block settlements" where one nationality of recent arrivals is predominant the above table showing percentage of population will be of value.

The third general feature of our population statistics to be noted is the returns of urban and rural areas. While no table of figures will be given the census returns show no change in relative proportions of Manitoba's urban and rural population from 1911-1926. As long as farming, lumbering, and mining continue to be increasing and growing forms of occupation it is probable that we will have little or no change as between urban and rural percentages. It should be noted, however, that our population distribution is rather to one corner or section of the Province. The southern part of the Province plus the relatively large population in the south eastern section leaves the other areas of Manitoba with a relatively smaller population. Greater Winnipeg according to the 1926 census returns, has a population of 263,310 or approximately 38% of the total population of the Province.

Following the brief review of the growth and constituent elements of population given above, it is important to consider the occupations in which our people are engaged. The Dominion and Provincial statistics in regard to agriculture are based on returns that are secured independently. As the results are quite similar we can be sure of the accuracy of these statistics. Manitoba has today, approximately 53,000 farms and, of this number, 90% continue to be operated from year to year. The agricultural returns show that 15,000,000 acres of land are occupied. Of this total acreage the fol-

following are the yearly average number of acres sown with grain as based upon the returns for ten year period 1917-26 inclusive:

Wheat	2,792,828	acres
Oats	1,409,810	"
Barley	1,228,228	"
Rye	283,481	"
Flax	131,811	"
Total	6,346,178	"

The remaining acreage is occupied and to some extent improved. The area of unimproved land is estimated at 6,065,526 acres. The average annual value of all agricultural products as computed from the returns of the eight year period 1917-1926 inclusive is \$14,251,248.00; the total value of all farm property in 1926 is estimated as \$475,711,765.00; the per capita revenue secured annually from agriculture is \$234.00.

While agriculture is the chief source of basic production in our Province, we must add other forms of wealth produced in such occupations as fishing, mining and wintering. To these can be added the wealth produced by secondary activities such as transportation, merchandising, banking, professional pursuits, manufacturing, etc., etc.

Any addition to our health and hospital programme, whether in the nature of an increase in current expenditure or in capital outlay for improvement of existing buildings or the erection of new ones, will require money. For this reason a review of our sources of wealth is important. The 1927 report of the Municipal Tax Commission contains a careful study of our provincial revenue. The following charts regarding information and expenditure require careful study. They are placed in the introduction of this report on the belief that such general financial matters are of primary importance in regard to any programme in the health and hospital field.

An introduction to a health and hospital survey would not be complete without general references to the important relation that exists between health and education. A detailed study of this head of work is contained in Part V of the report. At this point it will be sufficient to state that important developments in health education are sure to come and to have an important bearing on preventive medicine.

In addition to the aforesaid mentioned general conditions, your Committee has given some attention to the present Provincial Legislation in regard to health and hospitals. We have studied also the various forms of Government and the relation of Municipal, Federal and Provincial Officers, Departments, etc. In regard to transportation and the relation of this subject to diagnosis, facilities, hospital centres, health areas, etc., the physical features of the Province have been studied. The "Report on Unused Lands in Manitoba, 1926," contains a very careful investigation of this important subject and most of the material contained in the report may be studied in connection with the subject of health. The position of Winnipeg and the fan-like radiation of railroads and highways from this gateway centre is a situation that has a direct bearing on health problems. In this same general connection information regarding our climate and our position in the north temperate zone is of value.

# Part I

## Section 1

# TUBERCULOSIS

The communication of the Minister of Health and Public Welfare as contained at the beginning of this report was given prompt consideration by the Welfare Supervision Board. The Health and Hospital Survey Committee was appointed and this Committee in turn secured the services of Dr. Fred W. Jackson, of Wawanesa. Dr. Jackson undertook the duties of Medical Officer, and on March 6th, 1928, commenced the survey. The expenses from this time to April 30th, 1928, were met from the Welfare Supervision Board appropriation.

In this and the following three sections the purpose is to outline the method only whereby data on tuberculosis was secured. The remaining four sections of Part I contain comments and conclusions based on this original data.

The Medical Officer sent a general letter to the 533 practicing physicians in Manitoba before commencing his field work. From March 11th to March 19th, he spent at Ninette Sanatorium and while in this institution made a thorough survey of the following problems:

- (1) Methods of Obtaining Patients.
- (2) Treatment of Patients.
- (3) Accommodation.
- (4) Discharge of Patients.

In regard to these questions, it was found that the physicians throughout the Province constituted the main source from which patients were referred to the hospital. These patients, it was learned, came either for treatment or diagnosis. In regard to the former group, it was generally found that these cases were far advanced and often hopeless. As a result Sanatorium beds for the care of these patients were used for relatively long periods. In regard to the second group, it was learned that the disease was in a relatively early stage and the prospect of cure was as a rule very good. Statistical tables given on page 51 have further details regarding the average number of days stay at the Sanatorium.

It was pointed out that, owing to lack of accommodation, patients were discharged to make room for urgent cases and thus the benefit of a longer stay in the Sanatorium was frequently denied to many who needed it. The Sanatorium Staff stressed the fact that while all available space was used for patients there was a long waiting list. It was estimated that, at the present rate of admission and discharge, at least six months must elapse between the time of application and the actual admission of a patient. This lack of accommodation was due in the first place to the insufficient number of beds and secondly to the fact that the majority of cases were of the advanced type and required a relatively long treatment.

In regard to discharges, it was noted that some effort was made for

their re-establishment and that in all cases a complete record of residence, employment, home conditions, etc., was kept.

In a following section of this report further references will be made to the relationship existing between Nisette and King Edward as well as between these hospitals and Municipal and Provincial Departments of Health.

While at the Sanatorium, the Medical Officer made a special enquiry regarding contacts. This term was used to designate many general contacts such as those existing in factories, schools, boarding-houses, etc. For the purpose of this report, however, the term contact is used to refer only to the family group as it is felt that in the home this problem is found in its most intense form.

Following the visit to Nisette there was mailed to the practising physicians in the Province a questionnaire on tuberculosis, see appendix p. 61. At the same time letters were sent to the Secretary-Treasurers of Municipalities for information, see appendix, p. 62. At this point the Investigator was engaged and in the following section reference to her work in Winnipeg will be made.

With the improvement of road conditions in the Province, the Medical Officer undertook an extensive itinerary. His plan was to make a personal visit to every practising physician to every hospital and to every municipal council that requested a visit. The record of his travels is contained in the following table.

#### Medical Officer's Mileage

From March 10th, 1928, to September 20th, 1928  
on Health and Hospital Survey

Date	Miles	Destination
Mar 10-18	70	Methven-Brandon
May 1-2	174	Winnipeg, Lac du Bonnet, Whitemouth and Intermediate points
May 3	50	Winnipeg to Dugald and Return
May 5	153	Winnipeg to Souris.
May 7-8	190	Souris to Winnipeg
May 17	142	Winnipeg to Plum Coulee
May 18	99	Plum Coulee and Intermediate points
May 10	58	Winnipeg to Ste. Anne and Return.
May 21-3	332	Winnipeg to Wawanesa and Return
May 25-26	248	Melita and Intermediate points and Return
May 28	190	Wawanesa to Winnipeg
May 30	282	Winnipeg to Brandon and Return.
June 1	230	Winnipeg to Brandon and Intermediate points
June 1-4	213	Brandon to Minnedosa and Intermediate points
June 5	94	Birtle to Virden
June 6	195	Minnedosa to Winnipeg
June 13	143	Winnipeg to Brandon
June 14	100	Brandon to Virden
June 15	99	Virden to Wawanesa.
June 18	172	Wawanesa to Winnipeg
June 26	196	Winnipeg to Virden
June 27	177	Virden to Shoal Lake
June 29	47	Shoal Lake to Minnedosa.
June 30	133	Minnedosa to Wawanesa

Date	Miles	Destination
July 2	101	Wawanesa to Shoal Lake
July 3	65	Shoal Lake to Neepawa
July 4	101	Neepawa to Dauphin
July 5	70	Dauphin to Gilbert Plains and Return
July 6	115	Dauphin to Swan River
	52	Swan River to Benito and Return
	25	Swan River to Bowman
July 7	115	Swan River to Dauphin
July 8	82	Dauphin to Winnegosis and Return
	56	Dauphin to McCreary
July 11	77	McCreary to Minnedosa
July 12	201	Minnedosa to Russell
July 13	162	Russell to Wawanesa
July 15	170	Wawanesa to Winnipeg
July 18	124	Winnipeg to Gimli, and Return
July 19	120	Winnipeg to Carman and Return
July 25-26	284	Winnipeg to Brandon and Return
July 30	101	Winnipeg to Steinbach and Return
July 31	12	Winnipeg to Transcona and Return
Aug 3	306	Winnipeg to Brandon and Intermediate points and Return
Aug 7	260	Brandon to Winnipeg and Intermediate points and Return
Aug 9	140	Winnipeg to Stonewall and Intermediate points and Return
Aug 25	116	Winnipeg to Portage la Prairie and Return
Sept 3	143	Brandon to Winnipeg
Sept 4	118	Winnipeg to Portage la Prairie and Return
Sept 6	45	Winnipeg to Selkirk and Return
Sept 7	214	Winnipeg to Riverton to Stonewall and Return
Sept 17	143	Brandon to Winnipeg
Sept 19	85	Winnipeg to St. Eustache and Return
Sept 20	83	Winnipeg to St. Agathe and Return

7,473 — Total Car Mileage

#### Medical Officer's Train Mileage

June 10	118	Minnedosa—Birtle and return
June 28	342	Shoal Lake—Winnipeg and return
July 9-11	278	Winnipeg—McCreary and return
Aug 15-17	180	Winnipeg, Carman, Morden and Deloraine
Aug 22	142	Winnipeg—Pine Falls and return
Aug 27	279	Winnipeg—Dauphin—Swan River
Aug 28	101	Swan River—Dauphin

1,440

7,473 — Car mileage

8,913 — Total mileage

The Committee realizes that one of the chief values of this report depends upon the first-hand information secured through the untiring efforts of its Medical Officer. Further reference to these visits will be contained in reports on Public Health, Sanitation, Nursing Service, etc.

In regard to Tuberculosis, it was found that the practising physicians of Manitoba were keenly alert to the difficulties of the situation. It was



learned, also that the travelling clinic as carried on from Ninette Sanatorium, was much appreciated and resulted in the discovery of cases which sometimes were not known to the practising physicians. The travelling clinic method not only gives much desired information about actual cases but has an important educational value. The ideal arrangement would be the provision of periodical examination every six months if possible for all cases and contacts. The Medical Officer estimated that there were in the Province 2,400 potential spreaders of tuberculosis and concluded that approximately 450 of these were in rural Manitoba. In regard to children it was the general opinion that examinations could be better arranged and more thoroughly conducted by the clinic method as the usual night attendant on such an examination would be minimized. Fifteen or 20 children were in a group.

The Medical Officer was interested in the home conditions of those suffering from tuberculosis. He learned also that many homes were without proper sanitation and that in a most all provision could not be made for the care of active cases. He found also that it was particularly difficult for mothers suffering from the disease to leave home. Small children were members of the household. That cases of the disease existing at present may not be found without the aid of the clinic is the opinion gained as a result of this itinerary.

In discussing the question of payment for treatment received the Medical Officer learned that a number of people could contribute largely or entirely towards the cost of sanatorium care. If people have the means they should be required to pay for both examination and treatment. At the present time very little is contributed towards cost of examination and treatment. This rule should apply also to the travelling clinics in the country as well as to the stationary clinics in the City. An important source of revenue could be built up in this way and this money used to further the efforts to eradicate tuberculosis from our Province.\*

Owing to the fact that every part of the Province was visited some comparison between the various sections can be made. As tuberculosis is only one of the diseases considered in this survey, references to other phases of general health conditions in various sections are made in Part III of this report. In Part II of the report information regarding hospitals may be secured. While the Medical Officer visited several hospitals as well as other institutions of a public and a private nature, he did not find many cases of tuberculosis being cared for in such institutions. Reports received indicated that not more than ten patients suffering from pulmonary tuberculosis are cared for in general hospitals. Twenty-two were reported in the mental hospitals and four in other institutions. Further reference to this may be found in Part II.

\*Dr. David A. Stewart in a communication dated January 16th, 1918, made the following statement re payment: "All patients are expected to pay a percentage in whole or part of what he or she owes. However, the very poor amongst them outside the four cities more and more is interpreted by the number of cases that come in from so largely free treatment. So patients from individuals from the very poor in the past few years have fallen off considerably."

## Section I

### DATA SECURED FROM INVESTIGATION OF RECORDS

As the work of visiting the practising physicians in the many parts of the province and the hospitals and institutions enroute would require the major portion of the Medical Officer's time it was decided by the Commis-

tee to engage Miss A. B. Baird, Reg N., to make a thorough study of all available records on tuberculosis. Miss Baird was secured for this duty on April 1st, 1928, and for three months studied the situation. Beginning at the Health Department City Hall, Winnipeg, she examined the records for Winnipeg. Through the efficient co-operation of Dr. Douglas and his assistants answers were secured to the questions as outlined on the questionnaire card and records of more than 400 cases were completed. These cards were made out in duplicate and checked very carefully. The same method was used in connection with the clinics established in the Children's Hospital, General Hospital and King Edward Hospital of Winnipeg and in St. Roch's Hospital of St. Boniface. Through the co-operation of the physicians concerned much additional information was secured. The same card was used and every effort made to find answers to all the questions. When this information was not available visits were made to the homes of the families concerned. The records of the Red Cross were studied and cases listed.

The Investigator visited the Ninette Sanatorium on May 11th and spent two weeks checking information which had been secured up to that time with the data available at the sanatorium. Here many additional cards were completed.

Following the receipt of authority from Ottawa the records of the Department of Soldiers' Civil Re-establishment were available and a careful study of these were made by the Investigator and 130 additional cases recorded.

Miss Baird compared information compiled to date with the records in the Legislative Building. The securing of information concerning tuberculosis has been one of the duties of the Provincial Nursing Service. Our Investigator found that these records were very complete and learned that the nurse in charge of this branch of the work had a very adequate knowledge of the whole situation.

At the request of the Committee an investigation was made into the situation existing among the Indian members of our population. In this connection 79 cards were entered. Of this return, 47 contained complete information. Further investigation of this group was not possible as it was felt that while we have secured 79 returns we believe that a very large percentage of the total population are sufferers. Our enquiry showed that records for these could not be secured unless examinations of this portion of our population were made.

From the questionnaire sent to 533 practising physicians 491 replies were received and 246 sufferers from tuberculosis were listed as a result of information secured. The questionnaire mailed to secretaries of municipalities was replied to in nearly every instance and information secured added to the record cards.

From the above sources the Investigator secured a total of 2,476 records. In order to eliminate duplication errors in complete returns, etc. these records were revised with much care and finally 2,282 cases were regarded as certain and complete records of the tuberculosis situation in our province as at July 1st 1928. This information was used by the statistician and his comments concerning it are contained in Part I, Section 5, of this report. When comparing the different records it was discovered that 56 returns were of persons who had died. The names of those deceased persons, however, appeared on the existing records. The Committee realizes that it is very difficult to keep accurate and up-to-date information in regard to a matter of this kind, but believe that, if there were more co-ordination, such a discrepancy as this would not occur.

In the above we have given a very brief resume of the work of our Investigator. No comment or conclusion will be made at this point as this will be considered later in the report. The Committee wishes, however, to stress the fact that no available information was overlooked in this careful, thorough study. As a result of the survey, we have at present an up-to-date record of the situation in regard to the various forms of tuberculosis existing in our province.

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### Section 3 SURVEY OFFICE

Beginning in March, 1928, an office in the Legislative Buildings was obtained by the Committee and was staffed for nine months, during which time the facts were secured and tabulated and the report compiled. The work of the office was varied in character and only a brief report of it can be outlined here.

Letters were sent from the office to all practising physicians in the province and to superintendents of hospitals and institutions. All secretaries-treasurers of municipalities were corresponded with individually. Questionnaires were sent to doctors, secretaries of municipalities, hospitals, school teachers, public and private institutions. Copies of these documents are included in the appendix of this report.

As a result of the excellent co-operation of all concerned, and of the publicity given by the newspapers, returns were made promptly. Many physicians called at the Survey Office. Additional information was sometimes given or secured by telephone.

In order to secure data from other sources, an extensive correspondence was carried on with the other provinces of the Dominion, and with branches of the Dominion Government such as the Canadian Tuberculosis Association, Dominion Bureau of Statistics, Department of Health, etc. Additional information was collected from certain States in the Union and from Great Britain.

The information secured was filed and tabulated. In connection with uncompleted records, further correspondence was carried on to secure necessary information.

The office was responsible for keeping Committee and Board Meeting Minutes and for verbatim reports on Round Table Conferences. Considerable revision by the Committee of sections of the report as prepared by individual members was necessary. In this connection it may be added that the information gathered will be of general value in the future to the Department of Health and Public Welfare.

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### Section 4 ROUND TABLE CONFERENCES

It was felt by the Committee that its survey would not be complete without giving an opportunity to representatives of those institutions which were and had been actively engaged in caring for tubercular subjects in the Province to present their views on some of the many problems with which the Committee was grappling with the object of enabling the Committee to obtain a clearer conception of those problems from a practical standpoint, to learn of the difficulties which had been encountered or overcome, and thus get the benefit of their experience on the questions under consideration. Where could the Committee get first-hand information upon the problem of

tuberculosis as applicable to Manitoba? And whose opinion should be entitled to greater weight or consideration that the opinions of the representatives of these institutions?

Accordingly, the Committee decided it would hold a number, and as many as need be of round table conferences, to which the representatives of these institutions would be invited and in order to give these representatives ample opportunity for preparation, and with a view of centring the discussion upon some of the more important questions which had already arisen, a series of questions was prepared and forwarded to the various institutions prior to the dates fixed for the conferences. The following questions were submitted:

1 "Do you consider the amount of tuberculosis excessive regarding the prosperity, or country of origin of the population?"

2 "Do you consider that a reasonable attempt has been made in the past to handle the situation? If not, where did the fault lie?"

3 "What further steps should be taken with regard to individuals who have been reported as tubercular suspects?"

4 "How would you deal with the unskilled or homeless labourer who is discharged from further treatment under the classification of 'disease arrested'?" Further, what suggestions can you make with regard to arrested cases who can only return to unsuitable work or insanitary surroundings?"

5 "Do you think that Sanatorium accommodation should be provided for all active and infective cases, both adults and children, or, can these cases be handled in some other way?"

6 "Should an examination of contacts and suspects be made at regular intervals? If so, how can it be done?"

The first conference was arranged with representatives of the Manitoba Sanatorium at Ninette, the Municipal Hospitals at Winnipeg and the Hospital Commission of Winnipeg and was held on the 15th of May, 1928, in the Legislative Buildings in Winnipeg. In addition to the members of the Committee the following were present:

Mr John MacEachren, Chairman of the Manitoba Sanatorium Board

Dr D. A. Stewart, Superintendent of the Manitoba Sanatorium at Ninette,

Mr W. R. Milton, Chairman of the Hospital Commission, City of Winnipeg,

Dr A. B. Alexander, Superintendent of Municipal Hospitals, Winnipeg,

Mr George Stoker, Municipal Hospitals, Winnipeg,

Miss A. B. Baird, Tuberculosis Statistician,

Dr F. W. Jackson, Medical Officer,

Dr Stewart gave the following answers to questions submitted:

1 Q. Do you consider the amount of tuberculosis excessive regarding the prosperity, or, country of origin of the population?

A. No, the amount of tuberculosis is not excessive considering conditions generally, race, etc.

The death rate is now about 58 per 100,000 as compared with 120 to 125 twenty years ago and as compared with over 80 for Canada and nearly 90 in the United States.

The people hard hit, and the communities hard hit also, are those least prosperous, least progressive, least modern minded, those on poor land, new settlers undergoing pioneer hardships. The lessening of tuberculosis in the last generation has been to a great extent through better living conditions of all sorts, and

naturally those who have shared least in the improved conditions and in progress generally have shared least in this specific improvement—the lessening of tuberculosis.

The races hard hit have been I think some but not all, kinds of Austrians, some Scandinavians, but mostly those of mixed Indian blood. However no race and no station in life is exempt, and a partial survey recently in the Sanatorium found Canadian born in astonishing proportion.

While tuberculosis is lessening the demand for treatment for tuberculosis has rapidly increased.

2 Q Do you consider that a reasonable attempt has been made in the past to handle the situation? If not, where did the fault lie?

A Yes, a reasonable attempt has been made to handle the situation. Not as much outlay has been made by the Manitoba Provincial Government either in capital or current expenditures as in the other Western Provinces and some Eastern Provinces. The brunt has been borne by a voluntary organization The Sanatorium and by the City of Winnipeg in the King Edward Hospital.

The work has been good in spirit and quality, but especially in the last four or five years has not been sufficient in quantity. There have not been enough beds. The increasing demand for treatment hence the need for more beds has not been because disease has increased but because treatment has been comparatively successful and so has come to appeal more to the people. The putting of the control of treatment largely under municipalities rather than under the individual has had a very great influence also.

Field work talks, publications, visits, clinics, have helped to this result. Such field work has been increased in the past four or five years.

Interest in tuberculosis as it is seen in children has increased in the past few years. More field work and more interest in the Child Tuberculosis problem at an earlier date would have brought about the present attitude of the people the present willingness for treatment indeed almost rush toward treatment, a little sooner.

While there has been the best of good-will and full co-operation between hospitals the King Edward and the Sanatorium there has not been co-ordination or common understanding though there has been as between hospitals, good-will and in any special case discussed co-operation. There has not been sufficient co-ordination though there has been co-operation, with the City Nursing Service.

3 Q What further steps should be taken with regard to individuals who have been reported as tubercular suspects?

A There are just two things to do for suspects.

(1) See that they are kept in touch examined when necessary advised and helped. This is primarily the work of their own physicians, but the Sanatorium clinics are of great help, also the Public Health Nursing Service. Much more of this "touch" than is appreciated is already kept up.

(2) If necessary and when necessary as often as necessary, as long as necessary and promptly when necessary—enough Sanatorium beds should be available for them. Given enough beds.

the problem of the suspects in a small province like Manitoba is comparatively easy

- 4 Q How would you deal with the unskilled or homeless labourer, who is discharged from further treatment under the classification of "disease arrested"? Further what suggestions can you make with regard to arrested cases who can only return to unsuitable work, or insanitary surroundings?

- A A hard problem in the abstract and general but when brought down to individual by individual consideration, the problem shrinks to manageable proportions

Chronic cases of tuberculosis are of two classes

(a) First those with chronic disease who are ill and who will need sanatorium or hospital care or its equivalent for years to come or as long as they live. A few of these can safely be cared for in their own homes where homes are good, people very careful and no children in the homes. A great many such must be kept in sanatorium or hospital beds and this is the class occupying beds month after month, and year after year that make more beds necessary. But they need exactly the care they are getting and nothing very much less or cheaper will do. They need medical skill, good nursing and good surroundings. They need these for ordinary humanitarian reasons. Also because most of them can be salvaged from such unpromising material sometimes. But the best economic reason is that these cases must be segregated to prevent the spread of disease. There is no better investment of public funds than in the segregation of disease spreaders. This class needs sanatorium surroundings and facilities. They will sometimes be able to drop back to the cheaper "ambulant" routine but most of them need care in bed and all need to have care available in bed every day and indeed every hour as emergencies such as hemorrhage comes suddenly.

(b) The second class of chronic cases is the one in which general condition is good enough for limited work, good enough to carry on with under extra good conditions but not good enough for the only kind of work they can do or the kind of homes they leave. Many such have no homes and many though in fair general health are not safe in the community especially for homes with children because of spreaders of disease.

Some who belonged to this class in the past are getting out of it by means of surgical forms of treatment which are comparatively new.

Some can return to homes, exercise care be safe and be of economic value. The number who can be thus "absorbed" is remarkable.

The Sanatorium or Tuberculosis Hospital can give employment to such part or full time on pay. We have at present at the Manitoba Sanatorium nearly twenty five more or less in this class of work, some important phases of work being carried on by them. The arrangement is good for both parties—for them and for us.

When all these are eliminated, and people who always have been misfits, disease or no disease—allowed for the problem has narrowed down. In the Sanatorium today I can think of not more than three or four unsolved problems—and we may be

able to absorb these into some useful employment.

At any rate the problem is not as big as it seems. The solution, I am convinced, is not to be found in sheltered employment, industrial concerns or institutions like that at Papworth, England. These are expensive and are anything like successful only when some one man puts a personal touch to them that might do more good elsewhere. With thought and care and supervision many can be absorbed. In Minneapolis one man gives his whole time to getting employment for such. In short, with real study of individuality and value, I think practically all can be cared for, especially if tuberculous institutions do their duty in the way of giving employment.

- 5 Q Do you think that sanatorium accommodation should be provided for a large and infective cases, both adults and children or, can these cases be handled in some other way?

A Yes, the Sanatorium is a school, a college for this class of sick people. Extramural study is the exception and is not usually successful. Most pupils and students have to actually go to school, at any rate, have to get their start in school—even if they manage after that to carry on at home.

The cure of tuberculosis is not medicine but a "way of life" and indeed a "philosophy of life" also, and the application of special principles of treatment at the right time and in the right way. Even a good home does not give always good conditions to learn or practice the art of curing tuberculosis. Some "good" homes are very bad homes for this particular purpose. Though some are said to be not bad enough to need the Sanatorium, practically all do need it. It is when the tubercular man is on his feet and articulated that he is in the greater danger with to himself and others. He will make fewer mistakes when he considers himself sick enough to be in bed.

Those that are so bad that it is to use sending them need to come again. The resources of the Sanatorium will receive many classes in this way. Those classed as mild, not infrequently do "take well," but if they are really all in, they should still come. **IF ONLY FOR THE PURPOSE OF HAVING THEIR LAST WEEKS AND MONTHS AWAY FROM HOME AND OF DYING AWAY FROM HOME.**

Letting beds for a time at any rate for a large and infective cases, so that when office practice or field work discovers active disease, it can always be said "come right in to-morrow." A wait of two months is a fatal check to enthusiasm.

Of course not all in bed or missing but need treatment though nearly all need supervision. Just how many need treatment could be estimated approximately by checking over the data collected by one well acquainted with the diagnosis and prognosis of tuberculosis.

- 6 Q Should an examination of contacts and suspects be made at regular intervals? If so, how can it be done?

A Yes, it should be done, can be done and moreover it IS BEING DONE to a considerable extent. **RIGHT NOW.**

Doctors are keeping tabs on their tuberculous patients much better than before. The response to the Commission's enquiries is one proof of this. Sanatorium clinics held here and there gather in an astonishing proportion of the known contacts and

suspects and find a number also heretofore unknown. From July 1st, 1927, to July 12th, 1928—practically in a year 1,400 such have been examined with liberal use of the X-Ray plates in ten Manitoba centres and in the next two months eight or nine more centres will have been visited and likely 1,400 more examined. With 1,000 or more, examined in the same 14 months at the Sanatorium or at least 3,500 in all it can be seen that much is being done. Each of these eighteen points draws from a radius of from thirty to forty miles and the Sanatorium from a wider radius—so that they have gone a good way towards covering the Province. A map with these areas marked does not show very many blank spaces. Such clinics can cover the Province fairly fully each two years and some parts yearly. One of the very best results is in the increased interest and co-operation of all the local doctors, who keep up the supervision the year round.

The spread of tuberculosis is by contact. Every case comes from some previous case. If all existing cases were made safe there would be no subsequent cases. If all present noxious weeds were under safe control there would be no future noxious weeds. The great principles for eradicating tuberculosis are

- Search out the case by all means possible.
- Treat all that need treatment.
- Segregate all that need segregation.
- Have enough beds, and use them.
- Lighten the economic burden upon the individual.
- Teach the people.
- Keep in contact with all contacts and suspects.
- Get the people used to the idea of periodical general examinations by their physicians.
- Increase the use and better the standard of X-Ray plates of chest.
- Co-ordinate public health efforts.

Dr. A. B. Alexander, Superintendent of Municipal Hospitals, Winnipeg was then called upon, and made the following statements:

"Dr. Stewart has covered the ground thoroughly. He has shown what this disease has done and what is really observed of it. Tuberculosis is a contagious disease. Now the first thing to do in contagious diseases is to get and hold it and have it segregated. We certainly have not got rooms enough. We started out with 80 to 105 patients. During the last two years we have taken in a certain number of children from three, four to twenty children for a few months, then we have to let them go for lack of room. What are we going to do with them? Last year we started a ward in King George and we have as many as ten cases waiting admittance. We need more accommodation. The centralizing of this is one solution. In the early days patients would be sent down and landed on our doorsteps. Now that we are under the Charity Aid Act we have to take cases outside of Winnipeg which makes it harder for us to handle the cases from the City.

The next thing is the rounding-up of all the contacts with a special care for the children. Here in our own clinic all our patients and the children of them are brought down periodically for examination.

The discharging of patients from hospital—that is the hardest thing I know of. Where is he going to get work? So that we have a certain number of cases occupying beds who might be placed in proper boarding houses if there was some way to take care of them there. It is sometimes impos-



sible for me to get work for these people. Many good homes have little children where it is criminal to send them. One could run along this line for ages, but the two most important things are—first, segregation, second, the supervision of contacts.”

The meeting was then thrown open for discussion, and proceeded as follows:

**Member:** What is required in regard to making provision for additional patients?

**Dr. Stewart:** I do not know just how this can be answered.

**Member:** How does Manitoba stand as compared with the other Provinces to your knowledge?

**Dr. Stewart:** I think the main part of Manitoba stands exceedingly well. I think the figures would be very low.

**Member:** Are you prepared to give solution of the question of co-ordination?

**Dr. Stewart:** Co-ordination of institutions, clinics and teaching facilities.

**Member:** Should all cases of tuberculosis particularly advanced cases, be in a Sanatorium? On your trips through the country are you linking up your suspects of last year and checking them up this year?

**Dr. Stewart:** We manage to keep track of quite a number—mothers, sisters and brothers of patients—we try to see them all. Through the people we have in bed we keep track of the children, to some extent who are at home who are suspects. Doctors and country nurses bring in all suspects.

**Member:** Would you, with a little more time be able to express an opinion or offer a solution regarding sanatorium accommodation?

**Dr. Stewart:** There is the question of course that the man with chronic disease who cannot be cured and under fair conditions has years to live does not need to tie up the best infirmary bed—something cheaper would do, but these men won't stay put. We sometimes say “here is someone we can't make any better by keeping him in the infirmary let us slip him over into the pavilion—he will live just as long.” About a month or two afterwards, hemorrhages set in and he is shipped back to the infirmary again.

**Member:** Why could not these chronic cases be returned back to their own districts?

**Dr. Stewart:** It is always better that a patient be returned to his own district as soon as possible, but there is no hospital in Manitoba outside of Winnipeg centre, that will take tuberculosis patients in and there is no way of supporting them if they could take them in. There are no hospitals that have room enough to take chronic patients.

**Member:** But the same community is not paying for the patient. It is cheaper that rural municipalities should send the patient to you instead of paying \$1.75 per day to a hospital. That arrangement suits you as far as your Sanatorium is concerned, does it not?

**Member:** Where the cases are chronic and the patients are able to do something would it not be better for the community at large to have them segregated in a home where the upkeep would not be so great? When they are taken back into their own homes again are they not carrying the danger to the other members of the family?

**Dr. Stewart:** Whenever work can be done, work should be done—every little scrap of ability should be utilized—as I say, we employ about 25 ex-patients at Ninette. There are a good many schemes. Possibly the most elaborate scheme is the colony scheme. In New York—Reco Work Shops—

the whole village is made up of tuberculosis patients instructions are given, there is a workshop where people can go, and they are constantly under supervision. Hospital gowns used there are made there. These schemes have not proved entirely satisfactory—they apply to the few. When is a patient intelligent enough to leave the Sanatorium? We think we have them pretty well trained and then we are pretty well discouraged when we go into their homes. A few are able to support themselves during the summer months, but by fall they are not as well as they were in the spring time. We have patients we could dispose of if we only had some place to put them, where they had something to occupy their time up to their limitations, and there could be medical supervision very simply done.

**Member:** Re-Question 4—I had in mind an institution under the Government where they could do a little and earn a little for their living. We have to take care of them as we have to take care of our mental cases. We make provision for all mental cases in the Province, but here is a case of more danger to the community as a whole and why shouldn't we have some institution for them where they could do something and have someone to take care of them.

**Dr. Stewart:** It is very hard to make any classification of tuberculosis cases, as sometimes twenty years afterwards, they are still alive.

**Member:** Are you able to follow these cases up closely?

**Dr. Stewart:** Manitoba is a very small province—about 800,000 people and we can follow our patients up wonderfully well, especially with Miss Wilson's help. We have a fair idea what they are all doing throughout the Province.

**Member:** Getting suitable employment is a general problem in all phases of social work. If these people can do a little work they are far better than doing nothing. Sometimes their employers won't take them back, but they might be able to do work at something else. The situation is possibly more acute with Dr. Alexander than with Dr. Stewart as the farm will absorb, where industry won't absorb. There is only one standard in industry. Homeless men can be divided up into three groups—

Homeless because "Familyless."

Homeless because "Houseless."

Homeless because "Countryless." The last is a real problem. Now in social work more and more stress is being laid on the need of trained social workers to undertake this work which must be personal and follow-up work. Minneapolis has an employment agency for dealing with these handicapped workers.

**Member:** I think you will agree that examination of contacts and suspects should be done at regular intervals and that the same machinery should deal with the whole Province. What intervals would you suggest?

**Dr. Stewart:** Wherever we have gone, we have had the assistance cooperatively of every medical man. I think it helps to bring the patient to the medical man rather than take it away from him. We are very reluctant to take in anyone who is not sent by his local doctor, but we do, of course, in some cases, and we know we are helping the local doctor by doing so. We think it is important not to antagonize the local doctor. Of course, if we think Mrs. Jones needs a diagnosis and we find the local doctor is not willing to let her have it, then we make arrangements to give it to her. It is re-

markable how many little things we find out about people that need to be adjusted—namely—teeth, tonsils, throat, chest conditions, etc. There are a lot of things we can advise about.

**Dr. Jackson:** Would not the whole question be better and more economically handled if all the tuberculous activities were co-ordinated under one head? It has always seemed to me that the handling of the tuberculosis question has been divided into two parts—city cases, and the rest of the province. Is that an economic way of handling the problem?

**Mr. MacEachron:** I may say that the Sanatorium Board have decided that to do effective work, we must have a clearing station near Winnipeg. In fact, we decided to go on with it, our idea being particularly for the children. Now, we went as far as to take an option on the property and we were going ahead with it when your Commission started and we felt we might be on dangerous ground. There is a real need for a new institution when you consider the long waiting list.

**Member:** Who is going to control this clearing house?

**Mr. MacEachron:** This clearing house would be under the control of Ninette Sanatorium.

**Dr. Stewart:** The relation of tuberculosis to immigration is a big question. Dr. Jackson told me yesterday about a man who has been eight months in the country from England and who is deportable but he is not able to be deported at the present time and the Board of Ninette is warm-hearted, so we have taken him. The number of these cases in the course of a year is very considerable.

**Member:** Does the fault lie in the examination before they come to this country?

**Dr. Stewart:** Part of the fault lies there, and part in the fact of lower resistance. A man makes a desperate effort to come, lives in a poorer house and more crowded conditions. Then, of course, there is no doubt we have a number of people who are shipped over to Canada because they have shown signs of ill health. I don't see how people who are going to break down with tuberculosis six months from now could be eliminated.

**Member:** Could the Province control the kind of immigration you talk about?

**Dr. Stewart:** This man who comes will be our burden until we can put him on his feet. That is, he will be the burden of the Manitoba Sanatorium Board, or any individual who takes him in and leads him by the hand. Even if the Dominion Government decides the man is deportable, but he, by reason of his physical condition, cannot be deported for twelve months, they will not pay anything towards his support in the meantime, but limit themselves to the expense of deportation.

**Mr. Stokes:** Are we utilizing to the full extent the present facilities we have? As regards the City, we find that a good many cases of tuberculosis go to St. Roch's Hospital that should rightly go to the King Edward Hospital. If these cases were released from St. Roch's and sent to us we would save something like \$1,000.00 a month for their care, and it would release just that amount of space in St. Roch's for tuberculosis patients.

The Second Round Table Conference was arranged with representatives of the—

Shrivers' Hospital Winnipeg,  
Winnipeg General Hospital,  
The Children's Hospital,  
St Boniface Hospital,

and was held at the Parliament Buildings on Tuesday June 12th, 1928.

There were present in addition to the members of the Committee, and its own Medical Officer, the following doctors in charge of tubercular clinics

Dr Angus Murray, Shrivers' Hospital,  
Dr B. H. Olson, Winnipeg General Hospital,  
Dr Bruce Chown, Children's Hospital,  
Dr R. E. Alleyn, St Boniface Out patients' Department

The object of this Conference was the same as the first one held with representatives of other institutions and the discussion centred around the questions submitted for consideration

Q 1 "Do you consider the amount of tuberculosis excessive regarding the prosperity, or country of origin of the population?"

Dr Olson stated that his impression was that this was largely a matter of statistics but that he was of the opinion that he saw twice as much as he did ten years ago, and while he believed that there was more among Scandinavians he was not prepared to make any definite statement in that regard, that in the case of Indians tuberculosis was very prevalent and they were either chronic or very acute cases, the course of the disease continuing only from a few months to a year or two, while other people might have tuberculosis from twenty to forty years and carry on their work.

Dr Murray confined his statement to "Bone and Joint" cases, as he received very few of the others. His observations would lead him to the conclusion that cases of bone and joint tuberculosis were less frequent now than they were ten or fifteen years ago. He saw fewer acute cases now and agreed with Dr Olson that the disease appeared to be on the increase among Scandinavians. "I have made enquiries of others and Dr Oswald in a letter to me some time ago about this matter ended a paragraph by saying that—"bone and joint tuberculosis is evidently a disappearing disease."

**Member:** From the point of view of prosperity does any certain class of patients predominate? If so, would you say it was associated with the country of origin?

**Dr. Murray:** I suppose the larger number of cases come from the poor and some of the fairly well to do working people and there is an occasional case of the upper class but acute cases of the bone and joint tuberculosis are very few and far between.

**Member:** Do you think that poverty has anything to do with it?

**Dr. Murray:** No, I do not think it has. We do find an occasional subject where all the family live in one room.

Dr Murray further gave as his opinion that the pasteurization of milk did not have a great deal to do with the decline in the number of cases of bone and joint tuberculosis, nor did he notice that there was any excessive amount after the war, he could assign no reason for the disappearance of such cases, unless it might be better living conditions. He differentiated between acute and chronic cases stating that the average case became chronic after two to five years and that he was seeing more chronic cases than formerly as they now come up for operation.

Dr. Alleyne stated he was under the impression that Manitoba had one of the lowest death rates in the world second only to Saskatchewan, that at his last tuberculosis clinic the French nationality was most prevalent, but he was working in a partially French district and when so working he examined quite a number of contacts and that the percentage of such contacts was probably greater because of larger families.

**Member:** Have you had any experience with Metis cases? Is it not a fact that among them the disease is very prevalent?

**Dr. Alleyne:** I have not had as much experience with Metis as I have had with Indians. I was impressed with the prevalence of tuberculosis among the Indians. In fact I have not examined one that was not infected. The Indians cannot be segregated they will always drift back to their Reserves.

**Q. 2.** Do you consider that a reasonable attempt has been made in the past to handle the situation? If not, where did the fault lie?

**Dr. Olson:** Yes I think that one of the difficulties is that we have not had any uniformity. As you know the Sanatorium at Ninette is partially financed by a levy on the province exclusive of Winnipeg, St. Boniface, Portage la Prairie and Brandon. We who do a fair amount of tuberculosis work and send them to institutions for care, feel that we need an institution like Ninette for City patients just as much as the country does. We would send cases to Ninette but they are required to pay more than the average public ward rate and it is charged to the individual. On the other hand the patient that lives in the Municipality that is under the levy is not charged directly. I have known patients who have come back to find the equity in their homes taken away from them by the City on account of the expense of their Sanatorium stay. We here in Winnipeg are supposed to send our patients to the King Edward and they are supposed to look after our patients, but their accommodation is not sufficient. Patients have the impression that they go to this place to die and if we do succeed in getting them there, they are soon out again. At any rate we need a Sanatorium for our patients, as much as the country does. It strikes me that the only way that this difficulty can be overcome is by co-ordinating these institutions—all the work on tuberculosis to be placed under one head. We often have tubercular patients coming in from the country who require hospitalization while their maintenance is charged to the municipality which finds that it is responsible for the patient here when they are paying a levy to have them treated at Ninette. We therefore find it difficult to keep such patients in the city hospitals.

**Member:** Would you recommend some sanatoria authority which would include the clinics as well as the hospitals?

**Dr. Olson:** Yes, there should be more co-ordination, all the clinics which are doing tuberculosis work should be under that head.

**Member:** Should the governing body have the power to allocate where the patients should go? Is there any way of getting rid of that stigma from the King Edward?

**Dr. Olson:** Yes, I think if all the agencies were under one head that the stigma supposed to be attached to the King Edward, would disappear.

**Member:** What would your idea be regarding allocations?

**Dr. Olson:** I think the patient who lives close to Winnipeg should be dealt with in Winnipeg.

**Member:** Should patients in the early stage be sent to Ninette?

**Dr. Olson:** No, I think that the attempt to establish an institution to look after early cases is utterly impossible. There is no such thing as an early stage, at least we don't see it. Ninette works independently. King Edward works independently, the various clinics work independently. If we are going to devise some way of handling the tuberculosis situation in the Province properly, these agencies should be placed under one head.

**Member:** Do you consider that Saskatchewan is ahead of us?

**Dr. Olson:** Yes, I think they are ahead of us all along the line.

**Member:** Should patients be kept at Ninette when recovery is hopeless?

**Dr. Olson:** There is no doubt of that. Conditions at home are bad, or are such that they cannot reasonably be taken care of at home and the sanatorium is obliged to keep them.

**Member:** How would you relieve this situation?

**Dr. Olson:** That is a difficult question. The situation might be relieved by general hospitals taking tubercular patients. I would like to see this work extended.

**Member:** Would you take incurables?

**Dr. Olson:** No, I think they belong to the sanatoria. I feel quite confident that if one surveyed the patients at King Edward and Ninette that the percentage of incurables at Ninette would be just as high as at King Edward, because there are a lot of people sent in to the King Edward who are not hopelessly diseased and these get along fairly well. I think if there is very much difference between the type of case possibly the King Edward has a slightly higher percentage of incurables.

**Dr. Allan:** We try to keep the city patients, rural municipalities do not like to pay for the care of their residents at our institution.

**Member:** Do you think that there might be an interchange of patients between King Edward and Ninette?

**Dr. Olson:** Yes, there are certain cases where it is difficult for patients to take the cure in the city and I think they should be sent to Ninette. There are a great many instances where cases should be removed from their families. I don't think it is as good an institution as Ninette for tuberculosis, if there were more co-ordination the King Edward institution would be relieved of a great deal of the stigma at present attached to it.

**Member:** In view of the figures which we have here do you think it is advisable to build another sanatorium to handle further cases within reasonable distance of the city that might also be for country cases as well?

**Dr. Olson:** I am not prepared to answer that although the figures would indicate such a need.

**Member:** Is it difficult, Dr. Olson, to get a city patient into Ninette?

**Dr. Olson:** It is very difficult because Dr. Stewart feels, and feels rightly that the rural municipalities have the first right because they are paying to the institution. I know I have several cases waiting to get in there. I have one patient who has been five months in the General and when we got word that they had room for her, the need was no longer there. Yes, I think we should have more beds.

**Member:** Do you believe that every active case should be institutionalized?

**Dr. Olson:** I do. I believe that if we are going to get anywhere in the handling of this situation, we must provide accommodation for all active and

infective cases I think that all suspects should be institutionalized for a time

**Member:** This would mean that we have a shortage of 500 beds.

**Member:** I would like to know how patients could be discharged more quickly

**Dr. Olson:** By frequent examinations and constant care. The tendency in chronic cases is to let things slide and patients possibly do not come up for examinations in several months. In that way a patient might be in an institution for several months more than is necessary

**Member:** Would it be of assistance if much larger grants were given to the clinics so that more active treatment could be carried on in the home?

**Dr. Olson:** I think that would possibly be an alternative arrangement that might have some value

**Member:** If you had an extra staff whose sole business it was to go into the home conditions and deal with them, to visit patients constantly and keep them up to the mark, would it relieve the situation? Would it relieve it enough to justify the extra expenditure?

**Dr. Olson:** I don't think that would be a satisfactory alternative. It might possibly help the problem of lessening infective tuberculosis.

**Member:** At present have you any method of following up these cases?

**Dr. Olson:** They are visited by the city nurses

**Member:** How often?

**Dr. Olson:** That depends on how sick they are. If they do not report to the clinic when they are supposed to, they are visited.

**Member:** What about country cases?

**Dr. Jackson:** They are visited by Public Health Nurses.

**Dr. Alleyne:** Do you think the doctor should be given a monthly report on the home conditions?

**Dr. Olson:** Yes. But if the doctor gets a report on home conditions he very often cannot do much about it

**Dr. Murray:** So far as the cases coming under my observation are concerned I can see how some of the arrangements and attempts that have been made are not satisfactory. For instance there is a lack of money to care for them. Acute cases come in to be sent out as chronic cases in three months. Then there are people who will not come into the hospital so long as they can avoid it. The reason that many of these cases are not treated is chiefly due to the attitude of the people themselves. This applies to adults as well as to the children. They come into the hospital in the beginning with acute disease and they won't have anything done or submit to treatment until the disease is shown by X-Ray, then it is too late to get the best results under treatment. The child goes out and runs around to come back again later. This costs the city, or the municipality, hundreds of dollars, because the parents of the child would not let the patient take advantage in the first place of the treatment provided. Some of these people wander from clinic to clinic. This is not as frequent as it once was because there is more co-ordination among the clinics. The irregular attendance at clinics increases the expense and this is still greater if the people concerned go from one clinic to another. It seems to me that people who are being cared for at the public expense should be compelled to do as they are told within reasonable limits.

**Member:** Can you say where the fault lies?

**Dr. Murray:** It is rather a mixed problem—the fault might be partially with the clinics.

**Dr. Alley:** I agree with Dr. Olson entirely. There should be more institutions and these should be all under one head. The place for any new institution would be in the City of Winnipeg.

**Dr. Chown:** Personally I think a reasonable attempt has been made to segregate cases who spread the infection to others. The question of a reasonable attempt largely depends upon what one's object is in trying to handle the question of tuberculosis. I presume our objective is to eradicate tuberculosis from the Province of Manitoba if possible. Can we eradicate it except by segregation? I don't think we can. Judging from such figures as Dr. Jackson has given us from Brandon I don't know whether the student gets sufficient education on this particular phase of the work or not. I see a good deal of carelessness in regard to diagnosis insofar as children are concerned. Sufficient training of the student is a question that has to be handled.

**Q. 3.** What further steps should be taken with regard to individuals who have been reported as Tuberculosis suspects?

**Dr. Olson:** I don't see what can be done except to have people submit to regular examinations. It could be done by the doctor who goes around to re-examine these cases at frequent intervals. It is done in other provinces. Exception has been taken to this plan on the ground that the work of examining should be done direct from the Sanatorium. I think it should be done by one of the sanatorium staff.

**Dr. Murray:** How are you going to handle the patient who won't let anyone examine him except his own physician?

**Dr. Alley:** We examined about two hundred cases, chiefly contacts and suspects. Reports were sent out or are being sent out to every family physician. We propose to have a similar survey in about two or three months.

**Dr. Olson:** These cases who are under medical care can only be approached through their family physicians. We could not very well go direct to these patients. If you want to follow them up you would have to follow them up through their doctors.

**Member:** How large a territory did you cover in that examination, Dr. Alley?

**Dr. Alley:** St. Boniface principally, as far as Lockport.

**Dr. Chown:** So far as tuberculosis suspects in children are concerned we need accommodation for observation for short periods to determine whether there is any activity.

**Member:** Could not that be done in the hospital?

**Dr. Chown:** It could, but this type of hospital treatment is too expensive and they could be handled at less cost in sanatoria.

**Member:** It would appear, particularly where children are concerned, and where it is feasible, that the examination should be carried out by a clinic in the city or by a doctor, whether he be employed by the sanatoria or not. In the latter case he should go to the patient providing the patient cannot come to him.

**Member:** Is that the solution?

**Dr. Olson:** I think so.

**Member:** Have we the staff to do that, or is it being done now?

**Dr. Jackson:** Ninette has a small staff this year.



**Dr. Murray:** How are the bills for these present clinics paid?

**Dr. Jackson:** By stamps sold last Christmas

**Dr. Alley:** You are disregarding the family physician altogether

**Dr. Olson:** No, approach the physician and have the examination done through him at intervals.

Q. 4. How would you deal with the unskilled, or, homeless labourer, who is discharged from further treatment, under the classification of disease arrested? Further, what suggestions can you make with regard to arrested cases who can only return to unsuitable work, or, unsanitary surroundings?

**Dr. Olson:** It practically always means that if a man is unskilled he has to go back to work that is unsuitable. The problem is a very difficult one as light occupation for a man or woman who is unskilled is not available as a rule.

**Dr. Murray:** The employer doesn't want him. His fellow labourer does not want him because he has to do his own work as well as part of his.

**Member:** There is a village in England, named Papworth, composed entirely of ex-tuberculosis patients who help to support themselves by part time labour on a non-competitive basis.

**Dr. Murray:** A lot of these people could look after themselves if they so disposed on a large well-managed farm.

**Member:** Without subsidizing the farm?

**Dr. Murray:** No, I doubt if it could be done without subsidy.

**Member:** Outside of Papworth, do you know of any cases in our own country, or the United States, where this is done?

**Member:** We were told of a New York work shop which handles and sells work by tuberculosis patients.

**Dr. Murray:** Anyone who knows farm labourers recognizes a very restless condition among these men and women. Go down to the employment agencies and you will see lots of men around, but the farmer cannot employ them because the farmer is too far out from the city.

**Member:** Can anything be done with this type?

**Dr. Olson:** I know some who are doing half-time work. There are a number of people working in Eatons, who are old employees and are doing part time and getting treatment.

**Member:** But are employers generally doing that sort of thing?

**Member:** Only in skilled trades.

**Dr. Murray:** It is very difficult for employers great or small to employ physically disabled help and meet the competition in business.

**Member:** What we are trying to get at is, should there be a recommendation for a farm at the public expense?

**Dr. Murray:** I think that would be a reasonable attitude to take. Has the Committee any information regarding the cases that are brought into the country in an active state?

**Dr. Jackson:** No, we have not.

**Dr. Murray:** There must be some pulmonary cases, because there are some bone cases.

**Member:** The examination is much more thorough now. It is done on the other side by our own men.

**Q. 5.** Do you think that sanatorium accommodation should be provided for all active and infective cases, both adult and children, or, can these cases be handled in some other way?

**Dr. Chown:** I would say that 90 to 99 per cent of the tuberculosis in children is due to parental infection. If we do not cope with these parents we are going to have children growing up with tuberculosis. In the type of case we see in clinics, the parent is the real cause of infection. But, we don't get the parent and here is where some of the trouble comes in preventing infection.

**Member:** Do you think the children with active disease should be in sanatoria?

**Dr. Chown:** If you want to prevent the infection of children, you must have more of the infectious cases in the sanatorium. Ninety per cent of cases in children can be traced back to adult infection by direct contact. I don't think the milk situation enters into it at all.

**Dr. Murray:** I should judge that the number of sanatoria beds required for bone and joint cases would not be very great in proportion to the number of cases because while the cases are acute and at first need hospital care, they soon can be sent to their homes—those cases who have decent homes. Then the case that has no home I should think would be quite as well and more cheaply looked after in a convalescent home.

**Dr. Chown:** It is more than a question of accommodation. Some won't go to a sanatorium.

**Member:** What would you do with a case three or four years of age? Could you take it away from its mother? How would that work out?

**Dr. Murray:** We find it impossible to get the parents to send their children a long distance away for treatment. Friends can get the parents to see the situation and get them to consent to the child being taken out from the home among strangers much better than can the nurse or the doctor.

**Dr. Olson:** Considering that the institution is filled to capacity all the time, it is obvious that more accommodation is needed. Ninette cannot handle all the country cases, let alone all the city cases.

**Member:** What is a fair recommendation to make—a bed for every patient?

**Dr. Olson:** Yes. There are a great many children infected by old cases who are not in hospitals or institutions. I have never run across any infectious cases among children that cannot be traced to the adults. There is a case where the nurse persuaded an expectant mother to come in for examination and it was found the mother had active tuberculosis and four of her children also.

**Dr. Chown:** We have seen cases where the child comes in with meningitis, which should be considered on a par with acute and infectious disease so far as children are concerned. A case like this on examination, is found to have infectious tuberculosis, and if we could go into the home we would probably find more cases.

**Member:** Is there no other way of handling these cases excepting through an institution?

**Drs. Chown and Olson:** No, especially if there are children in the home. No matter how careful the individual could be, there is danger.

**Dr. Allyn:** I do not think it is a matter of treatment in the sanatorium so much as it is a matter of education. Institutions, from an educational standpoint, are invaluable to patients. I know that patients who have been in

institutions do not give the trouble afterwards that patients do who do not get institutional training.

**Member:** Dr. Chown, have you any idea of the percentage of parents in the cases you see who have been in the sanatoria?

**Dr. Chown:** No.

**Member:** Could you get that information?

**Dr. Chown:** Yes, by looking up each individual case.

**Dr. Jackson:** In the clinics in Brandon it was recorded that of the 226 that had been examined, twenty-one had tuberculosis. Twenty-six cases of tuberculosis were found who had never been examined, and fifteen more cases were diagnosed with pleurisy. Of these sixty-two cases there were only twenty-one that were known previous to examination. So apparently for every known case there are two others that we do not know anything about.

**Dr. Chown:** It might probably be less.

**Q. 6** Should an examination of contacts and suspects be made at regular intervals? If so, how can it be done?

**Dr. Chown:** It would be intensely interesting if we had the chance to follow up these children to find out what does become of them.

**Member:** Would the expenditure necessary to follow up the cases, and go around to the homes and keep in touch with them, be justified by the results?

**Dr. Chown:** Yes, I think it would.

**Member:** Would it be of value to have these cases placed in institutions for from two to four weeks for diagnosis?

**Dr. Olson:** The value of that would depend largely upon the visiting doctor—what he is able to do with the case afterwards. If he finds bad conditions, or if he is not able to isolate the case, then the value is lost.

**Dr. Chown:** From the point of view of the children, I think it would be very valuable to find out what becomes of them. I think Dr. Olson would bear me out that most of the children show nothing under the examination excepting possibly malnutrition—probably nothing more. What becomes of these children afterwards? We don't know when they become pulmonary patients.

**Member:** If examinations were made, say one in every two or three months—would it assist?

**Dr. Chown:** I think it would be worth while to follow them up like that for a period of years.

**Member:** Is there any educational literature sent out on this subject?

**Dr. Olson:** The city have circulars on tuberculosis that are distributed to these people in regard to contagious diseases and tuberculosis.

**Member:** That doesn't apply to the country, though, does it?

**Dr. Jackson:** The Public Health Nursing Service does that.

# STATISTICAL REPORT RE TUBERCULOSIS

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Submitted to the Health and Hospital Survey Committee  
By H. P. Morrison, M.A., F.A.S., Assistant Actuary  
The Monarch Life Assurance Company

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September 20th, 1928.

The Chairman and Members,  
Health and Hospital Survey Committee,  
Province of Manitoba,  
Winnipeg, Manitoba.

Gentlemen

I beg leave to report as follows upon the records which you have prepared in respect to tuberculosis in the Province of Manitoba, and which you have submitted to me for statistical analysis.

## ORIGINAL DATA

**Tuberculosis Records.**—The records submitted to me were set out on cards, purporting to contain information as to each case of tuberculosis in the Province of Manitoba.

I have been given to understand by Dr. F. W. Jackson, under whose supervision these records were prepared, that the cards were completed in as accurate a manner as was possible in the circumstances. It should be borne in mind, however, that (1) the information was drawn from several different sources—hospitals, physicians, nurses, municipal clerks—that (2) it was voluntarily contributed and that (3) the records from which it was drawn were not originally made with any statistical object in view.

Consequently, it is likely that the cards contain a considerable number of inaccuracies, particularly with regard to the age of the patients, their home contacts and their actual physical conditions at the date of the survey—all points of material importance. Nevertheless, I believe that, in the main, the cards were substantially correct and certainly contain much valuable information which has not heretofore been available.

These cards may be taken to represent the known cases of tuberculosis (suspected, active or recently arrested), actually present in the Province of Manitoba as on July 15th, 1928, exclusive of cases amongst the Indian population.

**Population Records.**—Before any results of value could be deduced from the Tuberculosis Records, it was, of course, necessary to know the total population amongst which these known cases of tuberculosis existed. There is no means of ascertaining the population of the Province with real accuracy except at the time of the quinquennial Dominion census. I, therefore, had recourse to the last census, that of 1926, as contained in the volume issued by the Dominion Bureau of Statistics entitled "Census of Manitoba 1926," and, by certain methods, as indicated under "Tabulation of the Data," I amended the figures contained therein so as to have the population figures as at July 15th, 1928.

## TABULATION OF DATA AND COMMENTARY UPON THE RESULTS

**Number.**—I first counted the record cards and found their number to be 2,282. Then to ascertain the total population of the Province amongst which these 2,282 cases of tuberculosis existed as at July 15th, 1928, it was necessary, as previously indicated, to use and amend the figures of the 1926 census. In the volume "Census of Manitoba, 1926," issued by the Dominion Bureau of Statistics, it is shown that, exclusive of 13,216 Indians, there were in the Province as at June 1st, 1926, 625,840 people, the males numbering 325,300 and the females 300,540. The census volume also gives corresponding population figures for the previous censuses made in the Province and the percentages of increase from census to census.

Giving due consideration to these percentage increases and having in mind the births and deaths in the Province since the 1926 census, exact figures for which I obtained from the Vital Statistics office, and the influx and efflux of population due to migration, exact figures for which were not obtainable, I reached the conclusion that the population of the Province as at July 15th, 1928, would be fairly represented by adding 2 per cent to the male population established by the 1926 census and 3 per cent to the corresponding female population. This brought out a total population for the Province, exclusive of Indians, as at July 15th, 1928, of 641,632, the males numbering 331,806 and the females 309,556.

### Commentary

These figures of 2,282 cases of tuberculosis amongst a population of 641,632 bring out a general gross tuberculosis rate for the Province of 35.57 per 10,000 of population.

**Sex.**—I next sorted the record cards according to sex and found the 2,282 cases to be divided as follows: Male—1,168, Female—1,114. The corresponding male and female populations amongst which these cases existed were, as shown above: Male, 331,806 and Female, 309,556.

### Commentary

These figures bring out gross tuberculosis rates, by sex for the Province, of 35.20 per 10,000 males and 35.99 per 10,000 females.

**Age.**—The next sorting I made was by age, as given on the record cards, and separately as to sex. This sorting resulted as shown in the following

**TABLE I**  
**Showing the Distribution by Age and Sex of the**  
**2,282 Cases of Tuberculosis in the Province of Manitoba**  
**as on July 15th, 1928.**

Number of Cases				Number of Cases				Number of Cases			
Age	Male	Female	Total	Age	Male	Female	Total	Age	Male	Female	Total
1	2	1	3	27	24	41	65	53	7	9	16
2	5	2	7	28	32	31	63	54	6	1	7
3	4	5	9	29	35	32	67	55	6	5	11
4	10	2	12	30	52	43	95	56	8	3	11
5	11	12	23	31	24	12	36	57	8	2	10
6	9	9	18	32	33	32	65	58	4	..	4
7	10	13	23	33	25	19	44	59	7	2	9
8	11	17	28	34	29	33	62	60	6	2	8
9	19	21	40	35	35	38	74	61	2	2	4
10	21	12	33	36	36	20	56	62	2	1	3
11	12	12	24	37	22	14	36	63	1	..	1
12	13	30	43	38	33	30	63	64	1	1	2
13	18	19	37	39	23	12	35	65	2	..	2
14	20	27	47	40	47	32	79	66	3	..	3
15	15	23	38	41	17	8	25	67	1	..	1
16	12	27	39	42	23	15	38	68	1	1	2
17	17	28	45	43	24	14	38	69	2	..	2
18	17	33	50	44	19	9	28	70	..	1	1
19	18	22	40	45	23	11	34	71	..	..	..
20	39	47	86	46	21	8	29	72	2	..	2
21	23	40	63	47	8	4	12	73	..	1	1
22	24	42	66	48	23	7	30	74	..	..	..
23	24	30	54	49	10	8	18	75	1	..	1
24	23	43	66	50	17	9	26	76	..	..	..
25	36	41	77	51	7	4	11	77	1	..	1
26	27	33	60	52	14	6	20				

1168   1114   2282

A scrutiny of the foregoing table reveals a redundancy of cases at several of the quinquennial ages e.g., 20, 30 and 40. This is due, of course, to the original records having simply contained approximate ages, there having been, at their compilation, no apparent necessity for great accuracy in this regard. The table also yields other indications, such as the irregularity at some points in the number of cases at consecutive ages, that there was considerable displacement amongst the cases as regards the ages recorded on the cards. It was, therefore, apparent that no reliable statistical results would accrue from any attempt to use a yearly age basis. I therefore, grouped the figures in Table I in sections containing 5 ages each—0 to 4, 5 to 9, 10 to 14, etc., up to 75 to 79, beyond which latter age there were no recorded cases.

Then, using again the figures for the 1926 census, increased as already described—a method which I considered sufficiently accurate for the age-group totals as well as for the grand totals—I obtained the population by the required age-groups.

Dividing next the number of cases in each age-group by the population for the group and multiplying by 10,000, I determined the tuberculosis rate of each group for each sex and for both sexes.

The results of the foregoing operations are shown in the following:

TABLE II

Showing the Distribution by Age-groups and Sex of the 2,282 Cases of Tuberculosis in the Province of Manitoba as on July 15th, 1928, the corresponding Population Groups and the Prevailing Tuberculosis Rates per 10,000 of Population

Age Group	Male			Female			Total		
	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000
0-4	36062	21	5.82	35847	10	2.79	71909	31	4.35
5-9	38717	60	15.50	38027	72	18.93	76744	132	17.20
10-14	38918	84	21.58	38407	100	26.04	77325	184	23.80
15-19	32747	79	24.12	33000	133	40.30	65747	212	32.24
20-24	25221	133	52.73	25886	202	78.03	51107	335	65.55
25-29	21736	154	70.85	22494	178	79.13	44230	332	75.06
30-34	22351	163	72.93	22397	139	62.06	44748	302	67.48
35-39	25900	150	57.92	22497	114	50.67	48397	264	54.55
40-44	23696	130	54.86	19068	78	40.91	42764	208	48.64
45-49	19541	85	43.50	14913	38	25.48	34454	123	35.70
50-54	14726	51	34.63	11332	29	25.59	26058	80	30.70
55-59	10614	33	31.09	8198	12	14.64	18812	45	23.92
60-64	8457	12	14.19	6639	6	9.04	15096	18	11.92
65-69	6050	9	14.86	4765	1	2.10	10815	10	9.25
70-74	3677	2	5.44	3112	2	6.43	6789	4	5.89
75-79	2098	2	9.53	1682	..	..	3780	2	5.29
80 & over	1295	..	..	1292	..	..	2587	..	..
	<u>331806</u>	<u>1168</u>		<u>309556</u>	<u>1114</u>		<u>641362</u>	<u>2282</u>	

### Commentary

An examination of the foregoing table discloses rates increasing and then diminishing regularly with the age attained, a result very satisfactory from a statistical view-point and giving confidence in the soundness of the basic data and in the deductions to be made therefrom. The salient points to be noticed in a scrutiny of the rates are

(1) The rate of tuberculosis, for both males and females, increases rapidly at the younger ages but for each of the infantile, adolescent and young adult age-groups up to age-groups 25-29, the female rate is substantially greater than the male one—the female rate for age-group 0 to 4 being presumably unreliable.

(2) The maximum rate is attained at an earlier age by females than by males, age-group 25 to 29 yielding the maximum female rate and age-group 30 to 34 the maximum male rate.

(3) The male rate diminishes much more slowly than the female after attaining the maximum, the male maximum rate of 62.93 per 10,000 for age-group 30 to 34 diminishing only to 43.50 for age group 45 to 49 whereas the female maximum of 79.13 for age-group 25 to 29 diminishes to 25.48 for age-group 45 to 49.

(4) A tuberculosis rate of over 50 per 10,000 exists amongst our male population from age 20 to 45 and amongst our female population from age 20 to 40.

**Country of Origin.**—I next sorted the cards, already separated as to age and sex, according to the country of origin of the patients. I had at first contemplated a subdivision of the data in this regard into quite a number of racial groups, e.g., Canadian, British, Scandinavian, Latin, Slavic, etc., but, as the sorting proceeded, it became apparent that this would result in too great a scattering of the cases and age-groups that would be too small and irregular for valuable statistical results. I, therefore, deemed it advisable to proceed along broader lines and sorted into three main groups—viz., Canadian Born, British Born and Foreign Born. I then found, by the methods already noted, the corresponding population groups and so adduced the tuberculosis rates amongst the Canadian, British and Foreign Born by age-group and sex. The results are shown in the following.

TABLE III

**Canadian Born.**—Showing the Distribution by Age-groups and Sex of the 1340 Cases of Tuberculosis amongst the Canadian Born Population of Manitoba as on July 15th, 1928, the Corresponding Population Groups and the Prevailing Tuberculosis Rates per 10,000 of Population.

Age Group	Male			Female			Total		
	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000
0-4	35123	16	4.55	34855	9	2.58	69978	25	3.57
5-9	36657	50	13.64	35980	64	17.79	72637	114	15.69
10-14	36042	69	19.14	35525	89	25.05	71567	158	22.08
15-19	25886	56	21.63	26471	102	38.53	52357	158	30.18
20-24	15952	89	55.79	16631	121	72.76	32583	210	64.45
25-29	11071	89	80.38	11658	113	96.91	22729	202	88.86
30-34	9174	84	91.54	9762	78	79.70	18936	162	85.54
35-39	8969	63	70.30	8742	58	66.35	17701	121	68.35
40-44	7697	55	71.45	7077	31	43.81	14774	86	58.21
45-49	6678	31	46.41	5762	19	32.97	12440	50	40.19
50-54	5342	12	22.46	4423	14	31.65	9765	26	26.63
55-59	4125	9	21.82	3291	5	15.19	7416	14	18.88
60-64	3417	2	5.86	2824	3	10.63	6241	5	8.02
65-69	2601	5	19.22	2083	1	4.80	4684	6	12.81
70-74	1609	..	..	1301	1	7.69	2910	1	3.44
75-79	908	2	22.03	714	..	..	1622	2	12.33
80 & over	497	..	..	543	..	..	1040	..	..
-	211738	632		207642	708		419380	1340	



TABLE III—Continued

**British Born.**—Showing the Distribution by Age-groups and Sex of the 432 Cases of Tuberculosis amongst the British Born Population of Manitoba as on July 15th, 1928, the Corresponding Population Groups and the Prevailing Tuberculosis Rates per 10,000 of Population.

Age Group	Male			Female			Total		
	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000
0-4	261	0		277	0		538	0	
5-9	980	3	30.61	1062	2	18.83	1042	5	24.49
10-14	1145	4	34.93	1133	2	17.65	2278	6	26.34
15-19	3273	8	24.44	2770	10	36.10	6043	18	29.79
20-24	4577	17	37.14	4259	27	63.40	8836	44	49.80
25-29	4493	27	60.09	4935	20	40.53	9428	47	49.85
30-34	5697	33	57.93	5806	29	49.95	11503	62	53.90
35-39	8394	53	63.14	7020	31	44.16	15414	84	54.50
40-44	8575	47	54.81	6721	25	37.20	15296	72	40.07
45-49	6785	38	56.01	5064	9	17.77	11849	47	39.67
50-54	4809	21	43.67	3531	6	16.99	8340	27	32.37
55-59	3233	7	21.65	2414	4	16.57	5647	11	19.48
60-64	2425	4	16.49	1827	2	10.95	4252	6	14.11
65-69	1599	1	6.25	1351	..		2950	1	3.39
70-74	987	1	10.13	881	1	11.35	1868	2	10.71
75-79	602	..		530	..		1132	..	
80 & over	405	..		396	..		801	..	
	58240	264		49977	168		108217	432	

**Foreign Born.**—Showing the Distribution by Age-groups and Sex of the 510 Cases of Tuberculosis amongst the Foreign Born Population of Manitoba as on July 15th, 1928, the corresponding Population Groups and the Prevailing Tuberculosis Rates per 10,000 of Population.

Age Group	Male			Female			Total		
	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000	Population	Cases	Rate per 10,000
0-4	678	5	73.74	715	1	13.99	1393	6	43.07
5-9	1080	7	64.81	985	6	60.91	2065	13	62.95
10-14	1731	11	63.55	1749	9	51.46	3480	20	57.47
15-19	3588	15	41.81	3759	21	55.87	7347	36	49.00
20-24	4692	27	57.54	4996	54	108.09	9688	81	83.61
25-29	6172	38	61.57	5901	45	76.25	12073	83	68.75
30-34	7480	46	61.50	6829	32	46.86	14309	78	54.51
35-39	8547	34	39.78	6735	25	37.12	15282	59	38.61
40-44	7424	28	37.72	5270	22	41.75	12694	50	39.39
45-49	6078	16	26.32	4067	10	24.47	10145	26	25.58
50-54	4575	18	39.34	3378	9	26.64	7953	27	33.95
55-59	3256	17	52.21	2493	3	12.03	5749	20	34.79
60-64	2615	6	22.94	1988	1	5.03	4603	7	15.21
65-69	1850	3	16.22	1331	..	..	3181	3	9.43
70-74	1081	1	9.25	930	..	..	2011	1	4.97
75-79	588	..	..	438	..	..	1026	..	..
80 & over	393	..	..	353	..	..	746	..	..
	61828	272		51937	238		113765	510	

In order that the tuberculosis rates evolved in the preceding Table III may be more readily compared, I have omitted their accompanying figures of populations and cases and set down the rates only in juxtaposition in the following:

TABLE IV

Showing the Tuberculosis Rates per 10,000 of Population according to Country of Origin, Age groups and Sex amongst the 2,282 Cases of Tuberculosis in the Province of Manitoba as on July 15th, 1928.

Age Group	Male			Female			Total		
	Canadian Born	British Born	Foreign Born	Canadian Born	British Born	Foreign Born	Canadian Born	British Born	Foreign Born
0-4	4.55		73.74	2.58		13.99	3.57		43.07
5-9	13.64	30.61	64.81	17.79	18.83	60.91	15.69	24.49	62.95
10-14	19.14	34.93	63.55	25.05	17.65	51.46	22.08	26.34	57.47
15-19	21.63	24.44	41.81	38.53	36.10	55.87	30.18	29.79	49.00
20-24	55.79	37.14	57.54	72.76	63.40	108.09	64.45	49.80	83.61
25-29	80.38	60.09	61.57	96.91	40.53	76.26	88.86	49.85	68.75
30-34	91.54	57.93	61.50	79.90	44.95	46.86	85.54	53.90	54.51
35-39	70.30	63.14	39.78	66.35	44.16	37.12	68.35	54.50	38.61
40-44	71.45	54.81	37.72	43.81	37.20	41.75	58.21	40.07	39.39
45-49	46.41	56.01	26.32	32.97	17.77	24.47	40.19	39.67	25.58
50-54	22.46	43.67	39.34	31.65	16.99	26.64	26.63	32.37	33.95
55-59	21.82	21.65	52.21	15.19	16.57	12.03	18.88	19.48	34.79
60-64	5.86	16.49	22.94	10.63	10.95	5.03	8.02	14.11	15.21
65-69	19.22	6.25	16.22	4.80			12.81	3.39	9.43
70-74		10.13	9.25	7.69	11.35		3.44	10.71	4.97
75-79	22.03						12.33		

### Commentary

Several well pronounced features of the tuberculosis situation in the Province are reflected in the figures of the foregoing table.

(1) Comparing the rates at the juvenile and 'teen ages—under age 20—it is to be noted that, for both males and females, there are very much higher rates amongst the Foreign Born than amongst the Canadian or British Born. The rates amongst the British born males at those ages are also considerably higher than amongst the Canadian born but for females would appear to be about the same. It must be remembered in this regard, that the cases amongst British and Foreign born at these young ages were very few and, therefore not absolutely reliable, nevertheless the figures would appear to establish satisfactorily that there is a high tuberculosis rate amongst young people who have recently come to Canada, particularly amongst Foreign Born. The inference seems to be that there is laxity in our immigration requirements in respect to juvenile immigrants.

(2) For ages 20 to 24 amongst the males, the rates for Canadian and Foreign Born are about the same, while the British Born rate is substantially lower. For females the British Born rate is also the lowest, being 63.40 per 10,000, as compared with the Canadian Born rate of 72.76, while the Foreign Born rate is the highest recorded in the table, namely 108.09. As this latter rate is based on the quite substantial number of 54 cases, it would appear to substantiate the deduction made above that the young Foreign Born immigrants of recent years have not been subjected to proper selection.

(3) Examining now the rates amongst that important body of our population represented by the age-groups from 25 to 45 we find very interesting figures. The rates amongst the Canadian Born are higher for all the age groups and for both male and female, than the rates amongst the British and Foreign Born. There seems to be little doubt but that the figures here are simply a reflection of our strict requirements in recent years in respect of the physical condition of adult immigrants. The figures appear to establish definitely the efficacy of these regulations.

Comparing the British Born and Foreign Born rates, we find that, for males from 25 to 35 the rates are about the same—around 60 per 10,000—but for ages 35 to 45, the British Born rates are substantially higher than the Foreign Born. This latter comparison would seem to reflect our pre-war immigration regulations under which the British Born were much more freely admitted than the Foreign Born.

In regard to British and Foreign Born females, from 25 to 45, there is some indication, substantial for age-group 25 to 29, that the British Born have provided fewer cases of tuberculosis but on the whole, the rates amongst the two classes are very similar.

(4) With regard to the population over age 45, taking into consideration the paucity in the number of cases and the consequent irregularity in the rates, we find that on the whole, there is no very pronounced differentiation of rates as amongst Canadian British or Foreign Born except that, for ages 45 to 55 the British Born rates are distinctly high again a reflection of the immigration freedom of possibly 20 years ago.

(5) The principal impression left by this comparison of tuberculosis rates by country of origin is that the standard of physical examination made of immigrants upon their admission to Canada is directly reflected in the subsequent tuberculosis rates experienced by those immigrants. This is borne out by the foregoing comparisons of the British and Foreign Born rates which practically prove that our tuberculosis situation would have been improved if there had been less freedom in the British immigration 15 to 20 years ago and in the foreign immigration of recent years.

On the whole, however, our immigration requirements for adults have been decidedly effective, as evidenced by the substantially lower tuberculosis rates amongst both the British and Foreign than amongst the Canadian Born.

**Institutional and Non-institutional Cases.**—I next sorted the cards, by male and female, into two groups, according to whether or not the patients were in an institution for treatment. The result of this sorting was as follows:

	In an Institution	Percentage	Not in an Institution	Percentage
Male	396	34%	772	66%
Female	326	29%	788	71%

#### Commentary

It would appear that a considerably larger proportion of the tuberculosis cases amongst males is being treated in our institutions than amongst females. I cannot find anything in the records submitted to me to indicate why this should be so. It may be in the case of the males, that since the usual conditions of employment necessitate their close association with other individuals, when they become affected, it becomes imperative either through their own volition or through the coercion of their employers or associates, that they withdraw for institutional care, while in female cases of equal severity their more general restriction to home duties only and their daily

contacts being limited largely to their immediate family, render it not so obligatory, and oftentimes very inconvenient, that they retire to an institution.

**Arrested and Un-arrested Cases.** The cards, already separated as to sex and into institutional or non-institutional cases, were next sorted into two groups the arrested cases and other cases, the latter being designated on the cards as Active and Active and infective. The result of this tabulation was as follows:

	In Institution		Not in Institution			
	Arrested	Not Arrested	Arrested	Per-centage	Not Arrested	Per-centage
Male	69	327	133	43%	439	57%
Female	55	271	316	40%	472	60%

### Commentary

The significance of these figures would appear to be

(1) That, at the date of this survey, there were in our institutions, 124 patients, 69 males and 55 females, in whom tuberculosis had been arrested and who, presumably, would shortly be ready for discharge and that, ready to replace them, outside the institutions, living in their homes, in daily contact with their family and other associates, were 911 persons—439 males and 472 females.

Now, since the institutions for the care of tuberculosis are reported to be operating at full capacity, the foregoing figures would appear to reveal a very undesirable state of affairs. The figures, we may say, resolve themselves into a picture of 124 beds ready for vacation, with 911 stricken human beings waiting for occupancy.

Your Medical Officer, Dr. F. W. Jackson, has informed me further that the hospital accommodation of the Province, provided exclusively for treatment of tuberculosis, consists of the following:

Manitoba Sanatorium	.....	285 beds
King Edward Hospital	.....	130 "
St. Roch's Hospital	.....	40 "

Out of 722 cases undergoing institutional treatment, therefore, only 455 are being cared for in institutions especially adapted to the care of tuberculosis patients. The remaining 267 are being cared for in general, mental and children's hospitals, in the Old Folks' Home, in the gaols, etc.

(2) That the proportion of female cases not undergoing institutional treatment, in whom the disease has not been arrested is considerably less than amongst the male cases. This would appear to be another indication of the condition previously suggested, namely that female cases are not sent for institutional care to the same extent as male cases. Consequently, we find a larger proportion of unarrested female cases living in the normal environment of their homes, a constant danger to their immediate families.

(3) The much larger proportion of arrested cases in the non-institutional than in the institutional group is, of course, not an indication of the effectiveness of treatment outside the institutions. It is, rather, the opposite, since the large numbers of arrested cases now recorded as living their normal lives in the community are undoubtedly, in great part, those

who have recently passed through the institutions and, by the beneficent results of institutional care, have been enabled to regain their place in the outside world.

(4) It should be noted that the great majority of the cases recorded as Not in Institution and Not Arrested are out-patients of the various hospitals.

**Pulmonary and Non-Pulmonary Cases.**—Up to this point, I had dealt with the cards irrespective of the type of disease recorded. I now sorted the cards into Pulmonary and Non-Pulmonary cases, with the following results:

	In Institution		Not in Institution	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
Arrested	85	39	587	62
Not Arrested	561	37	853	58

#### Commentary

I also made a sorting in this respect by sex, but as no essential differences appeared as between males and females and to avoid confusion of figures, I brought the totals together as set forth above. The table indicates that non-pulmonary tuberculosis is present in only a very small portion of the cases and the records indicate their highly successful treatment. It should be mentioned that a very large number of the non-pulmonary cases are recorded in the youngest age-groups—0 to 4 and 5 to 9.

**Locality.** A desirable sociological and statistical result would have been to obtain tuberculosis rates by districts for the Province and this I had at first in view. The preliminary sorting of the cards demonstrated however, that for only a few districts was there a substantial and reliable number of cases and this, together with the fact that trustworthy figures of the population by districts could not be deduced from the 1926 census or otherwise, led me to abandon any attempt to determine tuberculosis rates by locality.

It seemed desirable to ascertain however, what proportion of cases belonged to the heavily populated urban district of Winnipeg as compared with the sparsely populated remainder of the province. I therefore, sorted the cards into two groups—in one being cases recorded as normally resident in Winnipeg and its vicinity within a 25 mile radius and, in the other, cases resident in the remainder of the province. The following results were obtained:

	Males			Females		
	In Institution	Not in Institution		In Institution	Not in Institution	
		Arrested	Not Arrested		Arrested	Not Arrested
Winnipeg District	246	232	216	187	193	208
Remainder of Province	150	101	223	139	123	264

#### Commentary

These figures would have been much more valuable, of course, if the corresponding population figures had been known. These could not be satisfactorily deduced from the census tables, however, nor from any other source, since in the last two years there has undoubtedly been a large movement of population between the Winnipeg and other districts which has gone unrecorded and which I should not care to estimate for the purpose of

computing rates. The danger would be too great that upon so inexact a basis the results would not be trustworthy.

An outstanding feature of the above tabulated numbers, however, is that for both males and females not in institutions, the arrested and not arrested cases in the Winnipeg District number about the same, but in the other districts the not arrested cases number more than double the arrested. The inference is that, by reason of the greater hospital facilities in the Winnipeg District, or complete social service to help lengthen the life of recovered cases, tuberculosis is there more effectively dealt with than in the rest of the Province.

**Home Contacts.** As a last tabulation, I separated from the other cards the not-arrested, non-institutional cases and took out totals of the home contacts recorded. Home contacts were also set out on the cards for Institutional and Arrested cases but it seemed to me that, in order to get some fair idea of the number of persons daily exposed to direct infection through association in the home with tuberculous persons, only the not-arrested, non-institutional cases should be used. The records were not as satisfactory as could have been desired on this point, as quite a number of cards contained no entry at all under Home Contacts presumably because the information was not available from the original records consulted. I simply tabulated the numbers of Home Contacts actually recorded, however, and while I believe the figures to be somewhat of an under estimate, I give them below.

	Winnipeg District			Remainder of Province		
	Cases	Home Contacts	Average per case	Cases	Home Contacts	Average per case
Male	216	788	3.65	223	673	3.02
Female	208	783	3.76	264	929	3.52

### Commentary

These figures show that, while there were, at the date of the survey, 911 persons in Manitoba suffering from tuberculosis and not confined to an institution for treatment, there were at least 3,173 more living in intimate association with them and in a great many cases in constant danger of infection.

**Occupation.**—The record cards provided for information as to the occupation of the patients. In a large number of cases, however, the occupation was not entered and I also found that figures as to the population of the province by occupation were not available. No purpose would have been attained by a mere listing of the occupations actually recorded, and I, therefore, with regret, was unable to deduce occupational tuberculosis rates.

I am, gentlemen,

Respectfully yours,

H. P. MORRISON

## Section 6

### PRESENT FACILITIES FOR DEALING WITH TUBERCULOSIS

The Medical care of Tuberculosis patients is carried out in four main ways

- 1 In Specialized Sanatoria for Pulmonary Tuberculosis
- 2 In General Hospitals.
- 3 At Out patient Clinics.
- 4 Under the Private Physician

#### 1.—In Sanatoria.

(a) The Manitoba Sanatorium is at Ninette in South-Western Manitoba 140 miles from Winnipeg. It is a completely equipped and well operated institution beautifully situated on the shore of Pelican Lake. The natural slopes of the rising land allow for the placing of sanatorium buildings on the various levels. There is good protection from the North. The sunshine record of this district makes it an advantageous place for direct heliotherapy.

It is very convenient to the Brandon and south western districts of the Province but its distance from Winnipeg is a decided disadvantage to patients from the City itself or those who have to use Winnipeg as a junction point on their journey.

It was originally opened with the expectation of caring for early tuberculosis, but has, as is generally the case, had to look after many advanced and chronic types which require prolonged treatment thus precluding the possibility of any rapid turnover of patients.

The Sanatorium is under the control of a governing body made up of laymen, physicians, representatives of the Government and the Union of Municipalities. Many view points are thus brought to its aid, nevertheless this governing body has no control over the tubercular situation in the Province, except for patients in their own institution.

Out of about 290 beds at the Sanatorium there are 133 for women, 61 in the infirmary building with full nursing care, 38 for less ill patients with pretty full nursing care but without night nurses and 34 for ambulant patients. Approximately the same ratio holds good for the men.

Ninette is open to all patients in the Province. Under a special agreement with "The Union of Manitoba Municipalities" a yearly levy is made by the Government which is paid to the Institution. It in turn cares for patients from these municipalities without further charge unless patients themselves are able and willing to contribute to the cost of their treatment.

The four cities Winnipeg, Brandon, Portage la Prairie and St. Boniface are on a different basis. They do not contribute to this levy but come under the "Hospital Aid Act". The city concerned is required to pay the statutory rate which is based on cost, but such payment is recoverable from the patient or those responsible if in a position to pay. At present this rate is \$2.10 per day.

In addition to the above group there are patients who pay the full cost of their maintenance, and ex-soldiers under the "Department of Soldiers' Civil Re-Establishment" for whom the regular department rates are paid.

The Government grant of 50c per day per occupied bed is made for all these cases.

It is from Ninette that the "Travelling Diagnostic Clinics" go out to



the various parts of the province. Further details of these clinics are given elsewhere in the report. The Sanatorium also acts as a diagnostic clinic for patients in the district who may present themselves for examination. One of the great difficulties is that no matter how valuable these "travelling clinics" may be much of this excellent work is nullified by the inability to provide beds for those who should come in without delay. A Public Health Nurse is attached to the Sanatorium for the follow-up of these prospective patients as well as those discharged from the Institution.

(b) The King Edward Hospital, a division of the Municipal Hospitals of Winnipeg, is under the control of the city and managed by the Hospital Commission. It is situated in the south end of Winnipeg on the banks of the Red River in large grounds of its own and operates in conjunction with the King George Hospital for communicable diseases which is under the same management. It has a nominal bed capacity of 100.

Originally admission to this institution was entirely limited to Winnipeg patients. Only within the past year has the hospital come under the "Provincial Hospital Act," making its beds available for cases from the Province at large. As there is generally a waiting list of Winnipeg patients, the change has not relieved the general situation to any great extent.

An out-patients service of a diagnostic and supervisory treatment character is maintained here.

Patients who are able to pay are expected to do so, but no intensive effort is made to collect. The hospital is maintained by the City of Winnipeg and the charges made are not as a rule recovered from the patient.

Dr. Alexander states that

"Our beds are fully occupied and we have not room enough. We started with 80 to 105 patients. During the last two years we have taken in a number of children—from three, four to twenty children for a few months, then we have to let them go because of lack of room. Last year we started a ward in King George Hospital and we have as many as ten cases waiting admittance. We need more accommodation. The centralizing of this is one solution. In the early days patients would be sent and landed on our doorsteps. Now that we are under the Charity Aid Act we have to take cases outside of Winnipeg which makes it harder for us to handle the cases from the City."

(c) St. Roch's Hospital under the management of the Sisterhood operating St. Boniface Hospital has approximately 60 beds available for pulmonary tuberculosis, which have been opened up within the past few years. In many cases these patients are only temporary waiting admission to Ninette.

The patients come from the cities or the rural municipalities. As payment is made on the basis of the "Hospital Aid Act" the rural municipalities object to paying the hospital rate as they are already contributing to Ninette through the "levy."

## **2. In General and Other Hospitals:**

The survey, as will subsequently be shown, has found only a very limited number of pulmonary cases receiving treatment in general hospitals. As a rule these are accepted temporarily while waiting transfer to a sanatorium.

The general hospitals in the province have not made any special provision for this type of patient, the result is that adequate treatment cannot be given. They hesitate to make special provision because of the objection

of their other patients. If any special accommodation is to be provided, it must be in separate quarters to overcome this. There are however many cases of surgical tuberculosis in the various hospitals of the Province. Within the past year, the Winnipeg General Hospital has opened accommodation for a limited number of surgical chest cases. Heretofore no special provision had been made for this form of treatment. Patients whose condition is suitable for operation are now being accepted by transfer from the various sanatoria. The same difficulty arises in regard to patients from rural municipalities as at St. Roch's; the municipalities feel that they are paying twice for the same patient.

Twenty-two tubercular patients are shown in the return sent in from Manitoba Mental Hospitals and three from the Home for Aged and Infirm, Portage la Prairie. Obviously the Sanatoria, under present conditions, cannot care for these.

### **3. At Out-Patient Clinics:**

Ambulant patients under treatment are kept under observation at the specialized tuberculosis clinics conducted by some of the hospitals. These are chiefly in the Winnipeg District. The General Hospital carries on an out-patients clinic in conjunction with the Health Department of the City of Winnipeg. 344 patients were under treatment during the past fiscal year. The Children's Hospital in 1927 examined 61 children because of some suspicion of tuberculosis, in most cases on account of contacts with advanced disease. Their annual report has the following paragraph:

"The chest clinic made 600 examinations and many of their patients require hospitalization. The problem of providing hospital accommodation for such cases, which although not needing sanatorium treatment, require hospital care and observation, is an acute one, and we hope that some solution will be arrived at in the near future."

St. Boniface Hospital began a clinic in 1927 and has dealt with 560 patients during the past eleven months.

While a definite follow-up work in the homes is attempted, there is no co-relation between any of these clinics, nor is there definite co-ordination between them and the specialized sanatoria for tuberculosis.

A nutrition worker associated with the Children's Hospital is provided by the Rotary Club of Winnipeg. She follows up the cases from the clinic who either have positive disease or who may come under the category of "suspects" or "contacts."

### **4. Under the Private Physicians:**

This group is largely made up of patients who are either waiting admission to or have been under treatment in a Sanatorium. In the case of the latter the disease may be arrested, recurrent or chronic, or they may have refused to remain under treatment. There are a certain number, however who are remaining in their homes by preference.

#### **(a) The Situation as it Concerns Children:**

No special provision is made for children having pulmonary tuberculosis or who are in the "suspect" class.

To quote Dr. Stewart:

"Accommodation of sanatorium type for tuberculous children is badly needed in Manitoba. At the present time, some of these children are scattered in several hospitals, the Sanatorium, the Children's Hospital, Winnipeg General Hospital and others, where special provision is not,

and cannot very well be made for them or where they endanger other children, or where they cannot be kept as long as they should. Others are more or less neglected. They need adequate accommodation of suitable special type."

**(b) The Situation as it Concerns "Cases with the Disease Arrested":**

There is no organized provision for the care of the tuberculous patient after discharge from the hospital except such medical observation as the hospital clinics or the follow-up nursing service can give. Subsidized employments, protected work-shops, such as the Red Cross have carried on for ex-soldiers, are not in existence.

Dr. Alexander states:

"The discharging of patients from hospital—that is the hardest thing I know of. Where is he going to get work? We have a certain number of cases occupying beds who might be placed in proper boarding houses if there was some way to take care of them there. It is sometimes impossible for me to get work for these people. Many good homes have little children where it is criminal to send them."

**(c) General Control of Tuberculosis:**

As will be inferred from the preceding paragraphs, there is no central control of tuberculosis in the Province, nor is there any co-ordinating factor in the work of the various Sanatoria, hospitals, or clinics. The exceedingly harmonious relation existing was very evident at the various "Round Table" discussions and is a matter for commendation.

To quote Dr. Stewart:

"While there has been the best of good-will and full co-operation between hospitals, the King Edward and the Sanatorium, there has not been co-ordination. Among the various clinics there has not been any co-ordination, or common understanding, or comparison of methods and results, or division of territory—though there has been between hospitals, good-will and in any special case discussed—co-operation. There has not been sufficient co-ordination, though there has been co-operation—with the City Tuberculosis Nursing Service."

THE FOLLOWING TABLES ARE TAKEN FROM THE BULLETIN OF THE CANADIAN TUBERCULOSIS ASSOCIATION AND GIVE THE SITUATION IN THE VARIOUS PROVINCES FOR THE YEAR 1927

	Estimated Population	No. of Deaths	Deaths per 100,000 Population	No. of Beds	Total Annual Govt. Grants—Upkeep
Canada . . . . .	9,507,000	7764	81.7	5401	\$3,465,332.00
Prince Edward Island . . . . .	87,000	72	82.8	—	—
Nova Scotia . . . . .	543,000	640	117.9	353	243,112.00
New Brunswick . . . . .	411,000	408	99.3	222	90,000.00
Quebec . . . . .	2,604,000	3145	121.8	1303	500,000.00
Ontario . . . . .	3,187,000	1802	56.5	2107	2,014,846.00
Manitoba* . . . . .	647,000	368	56.9	391	52,000.00
Saskatchewan . . . . .	836,000	388	46.4	455	167,424.00
Alberta . . . . .	617,000	394	63.8	50	72,700.00
British Columbia . . . . .	575,000	547	95.1	380	325,250.00

\* This does not include St. Roch's Hospital.

## Section 7 GENERAL DEDUCTIONS

One of the outstanding features which has been brought before this Committee dealing with the question of Tuberculosis is the lack of co-ordination amongst the various organizations which are concerned with its treatment or reduction. We have the Manitoba Sanatorium at Ninette, King Edward and St. Roch's Hospitals in Greater Winnipeg; there are the general hospitals scattered throughout the Province, also the asylums.

This Committee has taken evidence from four physicians who are in charge of clinics not including the one at Ninette or the travelling clinic, both of which are directly under the care of Dr. Stewart. In addition there are Public Health Services in the Cities and a Provincial Public Nursing Service. Finally, there is the family physician.

Dr. Stewart in his reply to "Question Number 2" refers to the lack of co-ordination amongst the institutions dealing with Tuberculosis. Dr. Olson says that there is no uniformity and recommends that all work on Tuberculosis should be placed under one head. With these must be included the point which has been raised by various doctors in conference that there is no uniform method of charging for treatment.

The Municipalities of the Province outside of Winnipeg, St. Boniface, Brandon and Portage la Prairie this year gave a grant of \$120,000 for the care of all tuberculous cases. In return for this sum these Municipalities are entitled to sanatorium care for their sick. Should patients from these Municipalities go to any other institution, a per diem rate has to be paid. Should a patient from one of the four municipalities previously mentioned go to Ninette, he is charged for on a daily basis. His indebtedness to the Sanatorium is acknowledged by the Municipality and if paid is recovered by the latter from any property which the patient or those responsible for him, may own.

There is in addition the question of allocation of patients. Ninette may and frequently does have a long list of patients waiting for admission at a time when King Edward and St. Roch's hospitals have empty beds. City patients sent to Ninette pay more than the average public ward rate charged in Winnipeg.

From all this the only deduction that can be made is that if tuberculosis is to be reduced in the province, there must be some centralized authority. The various organizations dealing with tuberculosis have originated from time to time as occasion demanded. Their inception was due to the enthusiasm of the individual or the action of some group or local public health authority. Their only relation to any central body lay in the necessity of reporting cases to the Provincial Board of Health. As the latter took no further action than to exercise a general but vague supervision over matters which concerned public health, it is apparent that co-ordination through that body did not exist. Ninette and the other clinics offered help with a free hand and exhorted people to come to be examined. Having found evidence of disease they were frequently compelled to say that for the time being there could be no further assistance. Bed treatment was needed and beds were not available. The other institutions such as King Edward and St. Roch's did not throw empty beds open for the general use of the Province. Beds were there but they must be paid for at a certain fixed rate per diem. The general hospitals in many cases have no beds available for such chronic and long drawn out cases even if accommodation were suitable. Further, general hospitals do not carry out the search for patients, but receive most

of their admissions as emergency cases, or through their out-patient departments. Here then, is another evidence of lack of uniformity.

If tuberculosis is to be conquered it can be done by having some co-ordinating system which will encourage the patient to come to any centre for examination, with the understanding that should he be shown to be a sufferer from tuberculosis his treatment can be commenced at once.

The question then arises, what is the present situation with regard to beds for tuberculous patients? If not adequate, what number will be required to take care of the needs of the Province? With this must also be included the question, how long will it be necessary to keep a patient in hospital?

It will be advisable to deal with the figures which have been secured by this Committee and then to consider what deductions can be made.

Of the 2,282 cases reported, 574 were receiving institutional treatment. Active and active and infective cases amount to 1,141. We have also the suspects, which are set at 342.

All those who gave evidence, implied that a certain number of beds must be set aside for the observation of suspects, though it was suggested that the period of residence might be as low as two to four weeks. (It must not be overlooked that a certain proportion of suspects will progress to active tuberculosis, and beds must be found for their treatment.) It would seem that an allowance of three months in hospital would not be unreasonable for the suspects as a whole. On this basis eighty-five beds would cover the period of probation of 340 cases per annum.

Before trying to estimate the number of beds required for the active cases, under which heading are included active and infective it would be interesting to look at the record of the length of stay of patients in the three institutions devoted particularly to their care.

Name of Institution	No. of Beds	Average length of stay (days)	Patients in 2 yrs or over	Patients under 2 yrs and over 1 year	Patients under 1 yr & over 6 months	Patients under 6 months
Manitoba Sanatorium,						
Ninette " " " "	285	173	44	60	60	121
St. Roch's						
St. Boniface	40	279	2	3	13	21
King Edward						
Winnipeg " " " "	100	241	31	18	18	23

NOTE The average length of stay for St. Roch's Hospital is figured out from the hospital questionnaire, returned by the hospital.

The figures for the average length of residence in St. Roch's Hospital can scarcely be taken as a fair estimate, owing to the small number involved. Ninette and the King Edward supply a more reasonable basis of the number of beds likely to be required. The gross figures show that the number of active cases, which are not already in institutions, amount to 567. If a period of six months be allowed for the treatment and instruction of these, the number of additional beds required would be 284. To this must be added the 85 beds for suspects. We thus get a grand total of 369 beds, in other words, an institution somewhat bigger than we already possess in Ninette Sanatorium.

Before taking these figures as final, we must, however, consider the various occupations as shown in the following table:-

**Occupation**—(of 1,978 occupations given, they were divided as follows):

School children .....	391
Pre-school age .....	47
Domestic .....	572
Office workers .....	225
Stores .....	48
Factories .....	35
Travellers .....	40
Professions .....	114
Field .....	328
Tradesmen .....	178
	<hr/>
	1,978

194 of these cases served in the  
Canadian Expeditionary Force

It must be remembered that for various reasons, people refuse to come into institutions for the treatment of their diseases, and this, as the evidence shows, applies to tuberculosis.

We must then consider the different occupations and try to form an estimate of what influence may affect the members of different classes. Of children we have 438. Dr Stewart in the last annual report states that about 125 are admitted each year into institutions. Dr Murray states that Home and Joint Tuberculosis is much less than it used to be and quotes the statement that it is a disappearing disease. At a later date in his evidence he refers to the unwillingness of parents to allow their children to be admitted to hospitals for treatment or to keep them for a sufficient length of time when there.

From these views we may infer that even if a relatively large number of children enter institutions, they will not remain for long, since in a large proportion of cases further treatment is refused. A special institution for children if within a short distance of Winnipeg might remove this difficulty. Amongst the remainder parents will decide to carry on treatment at home. If 100 beds were allotted for children or 25% of the known cases accommodation would be available for four months treatment for 300 or for 3 months for 400 children. This would appear to be ample and might prove to be in excess of the number required.

Allowance for the large domestic class must be a difficult matter. We can divide this group into two—those who live in their own homes and those who live and work in the homes of others. In the first group we shall find many mothers and these will not remain in an institution, unless bed-ridden and far advanced in debility. The anxiety for the welfare of her children and the urge of her responsibilities will keep many a mother working at home who should be in a sanatorium. Providing beds will be of no benefit in her case for she will not make use of them. The domestic worker, unless she has a home to which she can return, must go to an institution. She is an economic liability and since she cannot work must be maintained at the public cost, as any savings she might have would be quite inadequate for a long illness. One hundred and eighty beds would allow six months treatment for 360 of these cases or a little over 60% of the total number.

If we take the sum of the four following groups we get a total of 348, and the same factors enter into all these different occupations. We find single young men and women who have been in most cases earning their own living for some years, frequently also assisting in the support of aged parents, if their earning powers suddenly cease, the parents who have been able to maintain them from infancy until they began to earn their livelihood,

cannot again assume responsibility for their maintenance. These young adults are compelled to go to a sanatorium to remain there until such time as they can once more return to work. Then there is the young married man with or without children a very valuable asset to the community. Every effort must be made to rehabilitate him. The firm employing him and his insurance companies if any will often give considerable assistance. The income from these sources will frequently be necessary to support his family in a reasonable amount of comfort. It is a very important factor in his recovery that he should not have anxiety over the welfare of his dependents, and that he should not be driven back to work before his recovery is complete. If 140 beds are allowed for the care of these four categories, it will give six months treatment to 28% patients or 86% of the group. These are people for whom every effort must be made to put them on the road to a condition when they are able to support themselves and their dependents.

The professional class would not appear to constitute as serious a problem or to require as large a number of beds. If we are to look on a sanatorium as an educational centre then this class should benefit greatly from a short residence and would carry on the treatment at home. For this reason, 25 beds would allow a six months treatment for 50% of the professional class.

One would say, thinking of the farmer and the farmer's son that the class under the heading of field should not require many beds, but we have in this group a large number of homeless men. Here one finds the casual labourer, the man who works on a farm during the busy times, at other times doing any casual work that presents itself whether in the country or city. The beginning of winter usually overtakes him with no savings, no lodgings excepting a mean boarding house or one of the hostels. Before the winter is over he has to depend upon the municipality or private charity for means to exist until open air work is available. It would not be too much to estimate that he would require 125 beds allowing six months treatment for 246 cases, or 75% of this class.

The tradesman is to be considered in the same category as the office worker, traveler, etc. He is usually in business in a small way, frequently assisted by his wife and family. He is very valuable to the community and his rapid return to health is an important economic factor. For that reason, 71 beds would give treatment to 142 or 86% of the number. If we add all these figures we get a total of 727 beds. Of this number 574 are already accounted for. Therefore it would appear as if the immediate needs of the province would be accounted for by the provision of 153 beds. A satisfactory solution of the tuberculosis problem of the province would not be settled even by the provision of 153 beds. There are 574 patients in institutions out of which number 425 are in places specially suited to their treatment. Of the remainder, a proportion are to be found in asylums and other institutions devoted to custodial care and may not be removed. A large proportion of these 149 institutional cases must however be in quarters where suitable treatment on modern lines cannot be carried out. They are scattered amongst hospitals throughout the province and it is reasonable to suppose that the hospitals would willingly transfer them to a sanatorium were such available. Taking a great many points into consideration 100 beds would appear to be necessary for these institutional cases. Added to the previous figures we have then in round figures, a grand total of 250 beds as representing the immediate needs of the province. No estimate however of the number of beds required can be complete while ignoring the fact that the three principal institutions of the province have had 77 patients for two years and over under their care. After such a length of time it would ap-

peared as if everything that medical service could do in the way of cure had been done. If it is a case of providing comfort and rest during a long period of gradual decline surely that could be supplied at considerably lower cost than in a modern expensively equipped hospital or sanatorium. A satisfactory disposal of these 77 cases would affect to a considerable extent the deductions.

It should be possible to have a section of a sanatorium set apart for these patients if it is not considered advisable to erect a separate building for them. In the former case nursing care and attention could be carried out at lower expense thus reducing the percentage cost of the whole. The outlook and position of a sanatorium or hospital dealing actively with tuberculosis in no way differs from that of a general hospital. The presence of a long drawn out chronic case for whom ever thing possible has been done kills the initiative of the staff and depresses other patients who have been admitted suffering from the same disease and hoping for a cure. It is for this reason that general hospitals find it advisable to remove from the wards to old folks' homes or other institutions patients who are not likely to be benefited by further treatment. In this manner beds are released for the cure of cases requiring active and immediate treatment. Many patients are likely to be cured or rehabilitated by a short period of treatment. The same view point would appear to be reasonable in the case of tuberculosis.

Dr. Olson in his evidence states that patients could be discharged more quickly by frequent examinations and constant care. That the tendency in chronic cases is to let things slide and that patients gradually do not come up for examination in several months. While the last remark is bound to be criticized severely any one who has had charge of several beds in a hospital will acknowledge that the re-examination of chronic cases is frequently deferred to a more convenient date. The patient who is developing new signs and symptoms from day to day whether they be evidence of a rapid improvement or of a steady deterioration is always a subject of interest and gets most attention from the staff. Visiting members of the medical profession are usually shown the cases where something of dramatic interest is taking place.

Let there be some centralized authority to which every institution taking care of tuberculosis shall report progress at intervals. Let there be an additional regulation that a special report as regards disposal must be made monthly on every patient who has been in the institution more than a year. In this way a review of all factors in the chronic case will be obligatory and should prevent the activities of the hospital or sanatorium from being clogged by a type of patient to be found in every hospital in excess in some hospitals which do not have frequent revisions of their cases.

It would appear as if Manhattan could solve her tuberculosis problems by three steps. First by the appointment of such centralized authority as has already been discussed. Second by the disposal of the chronic cases under suitable but probably more inexpensive conditions than are to be found at present in hospitals or sanatoriums. It must be remembered that many of these people are "active and infective". They require in many cases constant nursing care. They do not require repeated radiographic examination. They have not been benefited by the quartz lamp or other form of light therapy. They demand and deserve all that we can give them in the way of comfort nursing care recreation and interests. It would appear as if all these could be supplied at a lower cost than the present system required. Thirdly by the provision of 250 beds in addition to those already in use.

While the above project viz. an institution for chronic tuberculosis would appear to be ideal from almost every aspect it is going to receive



severe criticism from the patient, his friends and relatives. The removal to another institution where only cases supposedly incurable were accepted, would be regarded as a death warrant. No matter what care and attention were given patients would be unwilling to be transferred and their objections would be supported by their relatives. The attempts on the part of the health authorities to suppress the spread of tuberculosis would be defeated if the phthisical people insisted on returning home.

It must be recognized that we have no law which can prevent a consumptive from spreading tubercle bacilli. A sanatorium or hospital has not the same control as a gaol. Therefore the sentimental aspect becomes the subject of serious consideration. It is no use putting up a building for a man dying slowly from tuberculosis if he decides to die in his own home. The Committee must have some alternative scheme based on the supposition that nearly two hundred and fifty more beds are required.

There are in the Hospitals and the Sanatorium a number of ambulant cases that is cases who spend a large portion of the waking hours of the day out of bed. They are also brought to the table for meals and they take gentle outdoor exercise. There are also convalescent patients who have improved to the extent that their activities when restricted are somewhat similar to those of the ambulant class. It was 15% of the cases undergoing treatment under the existing plans were of this most type, one hundred beds would be tied. These patients would require nurses and the care of a physician. As they would not be in need of bed care the proportion of nurses would be much lower than in a sanatorium. The number of ward attendants would also be much less. Various other economies could be effected so that the cost per bed would be on very much reduced scale. If the buildings which housed these cases were within a short distance of Winnipeg privileges could be granted visiting days would be permitted patients free from city traffic might be allowed liberty to visit their friends in the city. In this way the severe treatment would be removed and convalescents might be willing to remain under treatment for a longer period should such a course seem advisable. It will be at once apparent that little if any loss would be entailed should the province after committing itself to one of these schemes find it unworkable. The housing of groups of buildings which housed one hundred ambulant and convalescents could with a very little expenditure be changed to accommodate a nearly equal number of bed ridden patients. In the estimate of beds required for immediate use the Committee has not considered two failures. The number of active cases is based on the figure of 2,292 and the occupations on a return of 1908. To achieve accuracy would require the addition of 10% of all the figures where the occupations are considered which would be covered by 15 more beds. Further it is apparent that if 10 beds are all tied for a period of six months each 20 patients half of the patients will not come under treatment for six months. This applies to many figures quoted. It must be remembered that the figure of 254 beds as recommended by the Committee is an arbitrary one. It is based upon certain facts that seem reasonable and the steps by which the final results are reached are discussed. Experts may demand a very much larger number of beds. It would be extravagant and injudicious to proceed at once to put up buildings to house all the known active and infective cases. In the first place there is no reasonable ground for believing that all these cases would qualify for treatment. In the second such buildings after having enjoyed an initial period of activity would be found with a large number of empty beds and an overhead cost which could not be reduced. The more satisfactory method of dealing with the question would be to erect a sanatorium arranged in such a way that units could be added

from time to time if required without interfering with the activities of the administrative or nursing departments. An architect versed in such matters should be able to prepare plans which would meet all the needs of expansion.

### DISCUSSION

Having disposed of the question of institutions it is necessary to consider the work of the clinics. Of these we have two kinds, the fixed and the travelling. The main difference between these would seem to be that in the case of the fixed clinic the patient can have an examination carried out entirely at his own convenience as regards time and place. In the travelling clinic while the place is made as convenient as possible, the long interval of time between examinations is a serious fact. Where the opportunity for a skilled examination occurs once in two years or even once a year, it must be recognized that the value of this method though great is very much limited. Many cases may run a course to the point of recognition of early symptoms and possible cure, to a condition of hopelessness of recovery in much less than a year. The wave of energy attendant on the progress of a travelling clinic is probably similar to what happens in other similar missionary efforts. For a time the interest and enthusiasm is high but it is impossible to maintain it at such a pitch and both physicians and patients return to the gait and mode of living to which they are most accustomed.

The evidence given to the Committee was rather conflicting. Dr Stewart spoke with marked enthusiasm on the value of the travelling clinic. If the travelling clinic is to justify itself, it must be by something more permanent than the discovery of cases of tuberculosis which have been previously overlooked. It must create a sustained interest amongst doctors and the populace generally and a desire to maintain that interest until tuberculosis is reduced to a minimum. That answer has not yet been given but would in the opinion of the Committee be solved by more facts.

Dr Thomson repeated the question of untrained grass-roots clinics for the purpose of investigating home conditions, giving assistance and advice where needed, did not impress the Committee as likely to help in the solution of the difficulties. This was not the view held by many other expert favourable reports on the benefits of tuberculosis clinics have been issued by several health authorities. The Committee was informed that cases are reported by City or Public Health Nurses and that in some conditions are insalubrious, very little can be done. Dr Murray referred to the fact that patients wander from clinic to clinic causing an unnecessary expenditure of public funds. The Committee considers that the clinics have three important functions:

- (1) To examine all those supposed to be suffering from tuberculosis.
- (2) To re-examine from time to time and to maintain a general supervision of those who for various reasons have not been admitted to a hospital or sanatorium.
- (3) To keep in touch with those who have been discharged from a hospital or sanatorium for the purpose of advising on progress, etc.

All those who gave evidence stressed the fact that nothing can be done without the co-operation of the family physician. It must not be forgotten, however, that many of the patients in the various occupations referred to previously cannot afford a family physician. This would apply to a greater extent where it followed an illness of six or twelve months.

It would appear to the Committee:

(a) That the division of clinics such as is to be found at present is reasonable.

(b) That fixed permanent clinics, or clinics held at frequent intervals

at strategic railway points such as Portage la Prairie, Brandon, Dauphin and some other towns where railway lines converge, would be of considerable value.

(c) That such clinics might be formed by the doctors practicing in the neighborhood or by clinicians travelling from some other point.

(d) That clinics in these towns should be at intervals of not greater than two months.

(e) That the remaining parts of the Province should be visited by clinics at intervals of six months.

(f) That progress reports should be sent either by the clinic or the family physician once in three months.

One of the most difficult questions that this Committee has had to deal with is (No. 4): "How would you deal with the unskilled labourer who is discharged from further treatment under the classification of 'disease arrested?' as a careful perusal of the answers given by Drs. Stewart, Alexander, Olson and Murray will show. At one point in the conference it was suggested that this question should be left out altogether since so many obstacles had to be surmounted. The solution of one problem of tuberculosis was remain unsettled as long as this large class is left in the air. The problem is there. Authorities have found it easier to suggest a temporary method of alleviation than a solution. It may not be that this Committee can settle the point but it cannot afford to ignore it. Dr. Alexander refers to the insurmountable difficulties but offers no solution. If Dr. Stewart's reply is carefully analysed it will be found that he deals with individuals who have homes to which they can return but does not face quite squarely that nightmare of superintendents: the homeless man who must be discharged to make room for others. The first part of his answer deals with cases in which according to the Committee's point of view accommodation must be found and therefore is outside the scope of this question. The second part refers to homes when it is presupposed that there is no home. Further, if the disease is arrested these men will not as a rule be spectators of disease. It is exceedingly convenient that employment can be found in and about the sanatorium. The Committee is quite convinced that "important phases of the work" (see Dr. Stewart's answer to Question No. 4, Section B) can frequently be carried out by men who had up to the time of admission never acquired a trade nor shown sufficient industry to have become possessed of a home.

Dr. Stewart whose experience in the matter is of the widest is opposed to the colonies which have been tried out in various countries. As this implies subsidies or assistance of some sort which must be provided by the State his position is very clear. We have not at present arrived at the stage of national sickness insurance in Manitoba and until that time comes Dr. Stewart considers it best to face each problem as it arises. Such an outlook is refreshing in an age when there is a tendency to throw all responsibility on the State. It must however be remembered that Ninette does not have to discharge a patient until some method of disposal has been found for him, even though another patient is waiting to occupy his bed. Undoubtedly patients in general hospitals occasionally get employment from the hospital when they have recovered but this does not solve the question of re-establishment.

Dr. Olson in his replies refers to former employees who are given light work by the firm which previously employed them. He has no answer to the important part of the information required. Dr. Murray feels that out-door work on a farm assisted by a subsidy is necessary.

This then, is the sum of the information the Committee has received, and it cannot be said that it is very helpful. Everyone acknowledges that there is a problem, but the methods by which it is to be met vary in the opinions of the experts. It would appear again as if a central authority could deal with the question successfully. This would not prevent individual institutions from utilizing every means of solving their own problems. But when such an institution had a patient ready for discharge and no local means of disposal, it would simplify matters considerably if the patient could be evacuated to the care of a central body which would keep the individual in a boarding-house at a much lower cost than in the hospital until such time as suitable work could be found. If it should be decided to operate a farm, assisted by a grant, then it must be on a small scale at first and should be near a city. This would give the men opportunities to go and look for work on their own account, for many of them would soon tire of the monotony of the same place and the restrictions imposed. Dr. Murray has pointed out the restlessness of this class of people, which would be a very good reason for going into the business on a small scale.

### Section 8 RECOMMENDATIONS

1. THAT two hundred and fifty (250) additional beds be provided for Tuberculosis patients, one hundred (100) of these beds to be allocated to the care of tuberculous children.

- (a) These additional beds to be in the Winnipeg District.
- (b) The new sanatorium should be designed to allow for expansion.

NOTE. The Committee does not feel that a future expansion should be in the Winnipeg District. If the need manifests itself one or more Sanatoria should be established adjacent to districts which have the largest incidence of Tuberculosis.

2. THAT all the Tuberculosis activities of the Province be co-ordinated under a central authority, with power to—

- (a) Allocate patients to institutions.
- (b) Co-relate the clinical facilities of all agencies caring for Tuberculosis.
- (c) To be responsible for maintaining the Tuberculosis Registry.
- (d) Enquire into the desirability of certain general hospitals, particularly those far distant from a Sanatorium providing accommodation for and being prepared to accept suitable cases from their own districts who, for public health and other reasons, cannot be cared for in their own homes.

3. THAT consideration be given to the extension of Visiting Tuberculosis Nursing Services to follow up the treatment in the homes of patients who have had a period in a Sanatorium thus shortening their stay there, or those who have not been considered suitable for Sanatorium admission.

4. THAT the records obtained by this Committee be continued as a permanent Tuberculosis Registry and kept up-to-date. This would imply placing Tuberculosis in the list of diseases for which compulsory notification is required. Such a Registry would—

- (a) Obviate the necessity of a future survey.
- (b) It would enable the exact situation in the Province to be known at any time.
- (c) It would assist in determining what results were being obtained by any particular method of handling.

5. THAT the Travelling Clinics be continued.

6. The Committee feels that there should be more of an equalization between the direct charge made to city and to country patients for their Sanatorium treatment.

7. The Committee also feels that further consideration should be given to the re-establishment of convalescent patients following their discharge.

It is suggested that the unskilled and homeless labourer should be given an opportunity of working under favourable conditions for a short period after his discharge. This would give him the means of building up his health and powers of resistance, and acquiring improved physique until such time as an opening for independent employment presents itself.

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## LETTER TO PRACTISING PHYSICIANS

March 24th, 1928.

Dear Doctor,—

As you probably know, the Honorable Dr. E. W. Montgomery, Minister of Health and Public Welfare, has asked the Welfare Supervision Board to form a Committee to be known as the Health and Hospital Survey Committee.

The duties of this Committee are as follows

1. To investigate hospitals and hospitalization throughout the Province
2. To investigate and determine the incidence of
  - (a) Tuberculosis (including contacts)
  - (b) Chronic, curable and incurable diseases.
  - (c) Acute illnesses, which include communicable diseases.
3. To investigate health conditions in the Province generally, with special reference to health in children of school and pre-school age
4. To enquire into Maternal and Infant Mortality

We cannot help but feel that every Medical man in the Province has information that will be of great value to us in making this survey. We also feel that all the Medical Profession, and especially the Medical Officers of Health, should help formulate a better programme of Public Health, and we would therefore ask your whole hearted assistance in this undertaking.

Shortly there will be mailed to you questionnaires dealing with the various phases of the survey and trust that you will give them your immediate attention. We will try and make these questionnaires as short as possible, so that we may not encroach overmuch on your valuable time.

Yours sincerely,

HEALTH AND HOSPITAL SURVEY COMMITTEE.

Medical Officer.

# **RECORD CARD** **HEALTH AND HOSPITAL SURVEY (TUBERCULOSIS) 1928**

1 Name \_\_\_\_\_ Address \_\_\_\_\_  
Municipality \_\_\_\_\_ Country of origin \_\_\_\_\_  
Age \_\_\_\_\_ Sex \_\_\_\_\_  
Type of disease—**Pulmonary** \_\_\_\_\_ **Non-Pulmonary** \_\_\_\_\_  
Present condition: Disease arrested \_\_\_\_\_ Active \_\_\_\_\_ {Active and  
Where under treatment \_\_\_\_\_ {Infective \_\_\_\_\_  
If at home—Condition (1) Bed ridden \_\_\_\_\_ About the { Light { Full {  
house { Work { Work {  
Sputum Examination \_\_\_\_\_  
Home Contacts {Under 15—Male(s) \_\_\_\_\_ Female(s) \_\_\_\_\_ Total \_\_\_\_\_  
{Over 15—Male(s) \_\_\_\_\_ Female(s) \_\_\_\_\_ Total \_\_\_\_\_  
Living Condition—Good \_\_\_\_\_ Fair \_\_\_\_\_ Bad \_\_\_\_\_  
If a member of the C.E.F \_\_\_\_\_

Welfare Supervision Board  
HEALTH AND HOSPITAL SURVEY COMMITTEE

**TUBERCULOSIS QUESTIONNAIRE**

Dear Doctor,—

Would you please fill in the following questionnaire re cases of Tuberculosis you have under treatment or supervision? Any information you can give us will be held as strictly confidential and will be for use of the Survey Committee only. If you have no cases at present, mark the questionnaire to that effect and return.

Yours truly,  
Welfare Supervision Board,  
HEALTH AND HOSPITAL SURVEY COMMITTEE.

Medical Officer

NAME	Address (Municipality)	Sex	Age	Type of disease Pulmonary or Non-Pulmonary	Bed ridden. About house Light work Full work	PRESENT CONDITION Arrested Active Latent and Infective	Spitum examination result

Do you know of any other active cases in your district that are not under treatment, or supervision?

NAME	Address (Municipality)	Sex	Age	Pulmonary	Non-Pulmonary

## Letter to Secretary-Treasurers of Municipalities

Dear Sir,—

Re—

It has been reported to this department that the above mentioned is a resident of your Municipality

If such is the case, would you please fill in the following questionnaire and return as soon as possible? If the above has moved, could you give us the new address?

Thanking you in advance, we remain,

Yours very truly,

HEALTH AND HOSPITAL SURVEY COMMITTEE.

Medical Officer

- 1 Country of origin .....
- 2 Number living in same house.....  
Under 15 years..... Male(s)..... Female(s).....  
Over 15 years..... Male(s)..... Female(s).....
- 3 Living Conditions—  
Good..... Fair..... Bad.....
- 4 Size of house—feet.....by feet.....  
How many stories? .....
- 5 Did the above mentioned serve in the Allied army? .....
- 6 In your opinion, have the living or housing conditions been in any way responsible for the ill health in this household? .....

Secretary-Treasurer



### Circular Letter To Doctors—Re Tuberculosis Cases

Dear Doctor,—

Our records show that you have been looking after the patient whose name appears on the enclosed slip.

We have been unable to get all the information required for our record cards, so we are writing to you in the hope that you will complete this slip and return it to us in the enclosed stamped return envelope.

We are trying to make our records in regards to Tuberculosis 100 per cent complete and we are sure that we can count on your co-operation.

Yours very truly,

Welfare Supervision Board,  
HEALTH AND HOSPITAL SURVEY COMMITTEE,

Medical Officer

- 1 Name. .... Address. ....
- 2 Country of origin. .... Age ....
- 3 Occupation ....
- 4 Number living in same home ....
- Under 15 years. .... Male .... Female. ....
- Over 15 years. .... Male .... Female. ....
- 5 Living Conditions—
- Good. .... Fair. .... Bad. ....
- 6 Did the above mentioned serve in the allied army? ....
- ..... M.D

**Circular letter sent to institutions listed below**

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Dear Sir

Would you please let us have the number of cases of tuberculosis amongst the inmates of your home, if any as we require these returns for the Tuberculosis Survey?

Should you have any cases we will forward you record cards, which we would like you to fill out and return to us

Thanking you,

Yours very truly,

HEALTH AND HOSPITAL SURVEY,  
Welfare Supervision Board

Medical Officer.

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The above letter was sent to the following twenty-four institutions

"Children's Aid Society, Dauphin.  
Children's Home, Winnipeg  
Children's Aid Society, Winnipeg  
Esther Robinson Jewish Orphanage, Winnipeg  
Home of the Friendless, Winnipeg  
Home for the Aged and Infirm, Portage la Prairie.  
Knowles Boys' Home, East Kildonan.  
Margaret Scott Mission, Winnipeg  
Manitoba Penitentiary, Stony Mountain.  
National Institute for the Blind, Winnipeg  
Old Folks' Home, Gimli  
Old Folks' Home, St. Boniface  
Old Folks' Home, Winkler  
Old Folks' Home, Middlechurch.  
Provincial Gaol, Winnipeg  
Provincial Gaol, Portage la Prairie  
Provincial Gaol, Brandon  
Ritchot Foundling Home, St. Norbert.  
St. Agnes Priory School, Winnipeg  
Social Welfare Commission, Winnipeg  
St. Boniface Orphanage, St. Boniface.  
St. Joseph's Orphanage, Winnipeg  
United Social Service Home, North Kildonan "

**Letter Mailed to All the Hospitals in the Province, Excepting the Winnipeg  
Hospitals, that Might Be Treating Tuberculosis**

March 19th, 1928.

"The Superintendent,"

.....Hospital,  
.....Manitoba.

Dear Madam:

**Re—HEALTH AND HOSPITAL SURVEY**

Would you please let us have at your earliest convenience a return showing:

1. The number diagnosed of active cases of tuberculosis under treatment in your hospital?
2. State whether pulmonary, or non-pulmonary?
3. Give sex and age of each?
4. Give Municipality in which they reside?

If you have no cases of Tuberculosis in your hospital for treatment, please let us know.

Very shortly you will receive a hospital questionnaire, which we trust you will fill out and return to us as soon as possible. Make sure, please, in the questionnaire, to let us have your needs and difficulties, as we want, if it is at all possible, to help you overcome them.

Yours very truly,

Welfare Supervision Board.

**HEALTH AND HOSPITAL SURVEY COMMITTEE.**

Medical Officer.





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